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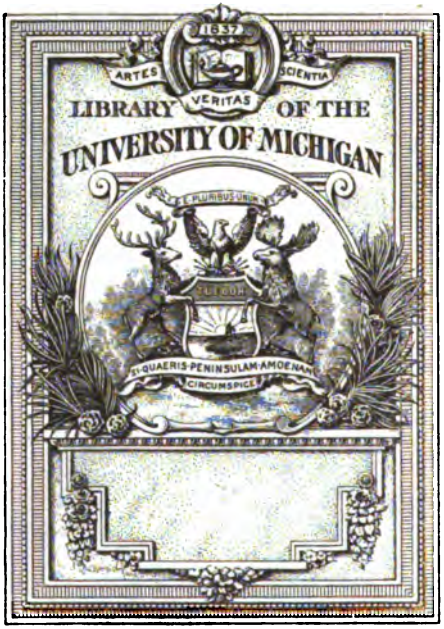
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CONTENTS.

		Page.
I.—Tariff of Jamaica: Effect upon Trade	*Dent*	1
II.—Trade in the Argentine Republic: Imports from United States	*Buchanan*	21
III.—United States-Brazilian Trade	*Hill*	26
IV.—Resources and Trade Opportunities of the Amazon Valley	*Kenneday*	29
V.—Machine Trade in Ecuador	*De Leon*	35
VI.—Resources of Ecuador	*De Leon*	36
VII.—How to Extend Our Trade in South America	*Hill*	37
VIII.—Emigration to South America	*Swalm*	38
IX.—Heating and Cooking Stoves in Uruguay	*Swalm*	40
X.—Port Works at Montevideo	*Finch*	41
XI.—Harbor Regulations of Puerto Cabello	*Valkmar*	42
XII.—Imports of Paraguay	*Ruffin*	44
XIII.—Sugar in Paraguay	*Harrison*	47
	Ruffin	48
XIV.—Agriculture in Mexico	*Pollard*	49
XV.—Brick Factory in Mexico	*Pollard*	51
XVI.—New Railroad Law of Mexico	*Clayton*	52
XVII.—Bids for Rails in Brazil	*Bryan*	53
XVIII.—Foreign Judgments in Brazil	*Hill*	54
XIX.—Judicial Reforms in Argentina	*Mayer*	57
XX.—Proposed Argentine Tariff	*Buchanan*	58
XXI.—Tariff Changes in Salvador	*Jenkins*	59
XXII.—Sugar Industry in Trinidad	*Loomis*	61
XXIII.—Coffee in Jamaica	*Dent*	62
XXIV.—Plan for Controlling Coffee Market	*Loomis*	63
XXV.—Canadian Canal Problem	*Brush*	64
XXVI.—Notes from Dawson City	*McCook*	65
XXVII.—Mining in Szechuan	*Conger*	67
XXVIII.—United States Trade in China	*Fowler*	71
XXIX.—Plumbago in Japan and China (Japan, 89—China, 90.)		89
XXX.—Petroleum in Borneo	*Everett*	90
XXXI.—French View of Philippine Situation	*Covert*	93
XXXII.—Cotton-Spinning Machinery in Japan	*Lyon*	93

		Page.
XXXIII.—Electric Industry in Japan	*Gowey*	96
XXXIV.—Passenger Transit in Japan	*Gowey*	97
XXXV.—Passenger Transit in Shanghai	*Goodnow*	98
XXXVI.—Proposed Railway Construction in Formosa	*Davidson*	98
XXXVII.—Railway Construction in the Transvaal	*Macrum*	100
XXXVIII.—Importers in the South African Republic	*Macrum*	100
XXXIX.—Federal Movement in Australia	*Bell*	104
XL.—Harbor Improvements at Victoria	*Smith*	107
XLI.—Covered Berths in Shipyards	*Metcalf*	109
XLII.—Prosperity of British Colonies	*Choate*	110
XLIII.—Trade Suggestions for Asiatic Turkey	*Washington*	113
XLIV.—The India-Rubber Trade	*Hill*	114
XLV.—Reforms in the Cotton Trade	*Boyle*	116
XLVI.—The Education of German Consuls	*Mason*	118
XLVII.—German Tool-Machine Trust	*Hanauer*	121
XLVIII.—Trade and Industries of Mannheim	*Osterhaus*	122
XLIX.—German Tariff on Agricultural Machinery and Tools,	*Mason*	124
L.—Suggestions for Exporters to Germany	*Hanauer*	125
LI.—German-American Balance of Trade	*Fisk*	126
LII.—Germany's Foreign Interests	*Monaghan*	127
LIII.—Germany's Wool Import	*Stern*	128
LIV.—German Exports of Soap and Perfumery	*Stern*	129
LV.—Duty on Druggists' Scales in Germany and France (Germany, 130—France, 131.)		130
LVI.—Public Ways and Parks in Silesia	*Erdman*	131
LVII.—Silesian Wool	*Erdman*	133
LVIII.—Locomotives in Germany	*Monaghan*	134
LIX.—Tramways in Milan	*Jarvis*	135
LX.—Trade of Belgium, First Five Months of 1899	*Lincoln*	136
LXI.—American Fruit in Norway	*Bordewich*	139
LXII.—American Fruit in the Netherlands	*Listoe*	140
LXIII.—American Barber Chairs in Germany	*Harris*	141
LXIV.—Patent Medicines in Portugal	*Townsend*	142
LXV.—Banking and Railway Statistics of Ireland, 1898	*Piatt*	143
LXVI.—Merchants in Athens	*McGinley*	144
LXVII.—Platinum, Iridium, and Osmium in Foreign Countries (Canada, 145—Brazil, 147—Colombia, 147.)		145
LXVIII.—History of the Naphtha Industry in Russia	*Smith*	147
LXIX.—Navigation of the River Volga	*Smith*	148
LXX.—Trade Openings in Russia	*Hanauer*	149
LXXI.—Legal Status of Foreign Corporations in Russia	*Heenan*	150
LXXII.—Failure of Crops in Southern Russia	*Heenan*	156
LXXIII.—Crops in Russia	*Heenan*	157

Page.

LXXIV.—INHERITED PROPERTY IN FRANCE.....*Covert* 159

LXXV.—ACCIDENTS TO WORKMEN IN FRANCE.....*Brunot* 163

LXXVI.—FOREIGNERS IN JAPAN.....*Gowey* 165

LXXVII.—TRADE OF HONGKONG IN 1898.....*Wildman* 166

LXXVIII.—NOTES (Licenses for Commercial Travelers in Russia—Leather Industry in Russia—Russian Regulations Concerning the Flax Trade—The German vs. American Pound Weight—Furniture in Germany—Dried Fruit in Germany—Export Premiums on Flour in Germany—Wheat and Sugar in Spain—Colonial Office in France—New Fuel in Belgium—Cost of Canadian Canals—Assay Offices in British Columbia—Railway Concessions in Mexico—Match Monopoly in Colombia—Electricity in Ecuador—Inland-Navigation Project in South America—Plans for Montevideo Port Works—Proposed American Bank in Caracas—Railroad Ties Forgotten in Brazil—New Remedy for Tuberculosis—Sale of Specimens of Persian Art—Siberia No Longer a Penal Colony—Emigration to Siberia—Japanese Tea Exports, 1898–99—New Treaties in Japan—Gas-Lighting Contract in Sumatra—Mining Law of the Dutch East Indies—Grain Export from China Prohibited—Chinese Likin Tax on Rice—Spanish Tariff on Flour—Russian Oil in the Azores—New Mail Service with the Azores—Postal Cars Wanted in France—Railway Management in Norway—Danish Exchange Rate on New York—Exchange at Guadeloupe—Rice Planting in Uruguay—Coal Trade of Montevideo—Dominican Duties Payable in Gold—Municipal Taxes in Madagascar—United States Trade with Mauritius—Exhibition in Constantinople—Art Exhibition in Antwerp—Consular Reports Transmitted to Other Departments)..... 168

LXXIX.—FOREIGN REPORTS AND PUBLICATIONS (New Openings for Trade in Russia—Gold in the Philippines—Irrigation in the Sudan—Gold-Mining Machinery in the Transvaal—Woods and Furniture in Russia)..... 185

REPORTS BY COUNTRIES.

	Page.
ARGENTINE REPUBLIC:	
Judicial reforms in	57
Proposed tariff of	58
Trade in the: Imports from United States	21
AUSTRALIA:	
Federal movement in	104
AZORES:	
New mail service with the	181
Russian oil in the	181
BELGIUM:	
Art exhibition in	184
New fuel in	172
Trade of, first five months of 1899	136
BORNEO:	
Petroleum in	90
BRAZIL:	
Bids for rails in	53
Foreign judgments in	54
India-rubber trade in	114
Platinum, iridium, and osmium in	147
Railroad ties forgotten in	176
Resources and trade opportunities of the Amazon Valley	29
Trade with United States	26
BRITISH COLONIES:	
Prosperity of	110
CANADA:	
Assay offices in British Columbia	174
Canal problem	64
Cost of canals in	173
Harbor improvements at Victoria	107
Notes from Dawson City	65
Platinum, iridium, and osmium in	145
CHINA:	
Grain export from, prohibited	180
Likin tax on rice	180
Mining in Szechuan	67
Passenger transit in Shanghai	98
Plumbago in	90
United States trade in	71
COLOMBIA:	
Match monopoly in	174
Platinum, iridium, and osmium in	147
DENMARK:	
Danish exchange rate on New York	182

	Page.
DOMINICAN REPUBLIC:	
Duties payable in gold in	183
EAST INDIES, DUTCH:	
Mining law of the	180
ECUADOR:	
Electricity in	175
Machine trade in	36
Resources of	36
ENGLAND:	
Covered berths in shipyards	109
Reforms in the cotton trade	116
FORMOSA:	
Proposed railway construction in	98
FRANCE:	
Accidents to workmen in	163
Colonial office in	172
Duty on druggists' scales in	131
Inherited property in	159
New remedy for tuberculosis	177
Postal cars wanted in	181
GERMANY:	
American barber chairs in	141
Consuls, education of	118
Dried fruit in	170
Duty on druggists' scales in	130
Export premiums on flour in	171
Exports of soap and perfumery	129
Foreign interests of	127
Furniture in	170
German-American balance of trade	126
Locomotives in	134
Pound weight, German vs. American	169
Public ways and parks in Silesia	131
Silesian wool	133
Suggestions for exporters to	125
Tariff on agricultural machines and tools	124
Tool-machine trust in	121
Trade and industries of Mannheim	122
Wool import of	128
GREECE:	
Merchants in Athens	144
GUADELOUPE:	
Exchange at	182
HONGKONG:	
Trade of, in 1898	166
IRELAND:	
Banking and railway statistics of, 1898	143
ITALY:	
Tramways in Milan	135
JAMAICA:	
Coffee in	62
Tariff of: Effect upon trade	1

	Page.
JAPAN:	
Cotton-spinning machinery in	93
Electric industry in	96
Foreigners in	105
New treaties in	179
Passenger transit in	97
Plumbago in	89
Tea exports of, 1898–99	179
MADAGASCAR:	
Municipal taxes in	183
MAURITIUS:	
United States trade with	183
MEXICO:	
Agriculture in	49
Brick factory in	51
New railroad law of	52
Railway concession in	174
NETHERLANDS:	
American fruit in	140
NORWAY:	
American fruit in	139
Railway management in	182
PARAGUAY:	
Imports of	44
Sugar in	47
PERSIA:	
Sale of specimens of art of	177
PHILIPPINE ISLANDS:	
French view of situation in	93
PORTUGAL:	
Patent medicines in	142
RUSSIA:	
Crops in	157
History of the naphtha industry in	147
Leather industry in	168
Legal status of foreign corporations in	156
Licenses for commercial travelers in	168
Navigation of the River Volga	148
Regulations concerning the flax trade in	169
Trade openings in	149
RUSSIA, SOUTH:	
Failure of crops in	156
SALVADOR:	
Tariff changes in	59
SIBERIA:	
A penal colony no longer	178
Emigration to	178
SOUTH AFRICAN REPUBLIC:	
Importers in the	100
SOUTH AMERICA:	
Emigration to	38
How to extend United States trade in	37
Inland-navigation project in	175

	Page.
SPAIN:	
Tariff on flour in	181
Wheat and sugar in	171
SUMATRA:	
Gas-lighting contract in	179
TRANSVAAL:	
Railway construction in the	100
TRINIDAD:	
Sugar industry in	61
TURKEY:	
Exhibition in Constantinople	184
TURKEY, ASIATIC:	
Trade suggestions for	113
URUGUAY:	
Coal trade of Montevideo	183
Heating and cooking in	40
Plans for Montevideo port works	176
Port works at Montevideo	41
Rice planting in	183
VENEZUELA:	
Harbor regulations of Puerto Cabello	42
Plan for controlling coffee market	63
Proposed American bank in Caracas	176

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

The fact that the market exchange value of foreign coins differs in many instances from that given by the United States Treasury has been repeatedly called to the attention of the Bureau of Foreign Commerce. An explanation of the basis of the quarterly valuations was asked from the United States Director of the Mint, and under date of February 7, 1898, Mr. R. E. Preston makes the following statement:

"When a country has the single gold standard, the value of its standard coins is estimated to be that of the number of grains fine of gold in them, 480 grains being reckoned equivalent to $20.67 in United States gold, and a smaller number of grains in proportion. When a country has the double standard, but keeps its full legal-tender silver coins at par with gold, the coins of both gold and silver are calculated on the basis of the gold value.

"The value of the standard coins of countries with the single silver standard is calculated to be that of the average market value of the pure metal they contained during the three months preceding the date of the proclamation of their value in United States gold by the Secretary of the Treasury. The value of the gold coins of silver-standard countries is calculated at that of the pure gold they contain, just as if they had the single gold standard.

"These valuations are used in estimating the values of all foreign merchandise exported to the United States. The value of the Indian rupee, although calculated according to law at the value of the pure metal contained therein, has a commercial value above the value of the silver bullion; consequently the value for customs purposes is determined in each case by the consular certificates attached to the invoice of exports from that country to the United States."

The following statements, running from January 1, 1874, to July 1, 1899, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account

that the ruble of Russia, for instance, fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, 1882, and 1891–95 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
British Honduras.....	.....do	.....do	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso (60 cents).
Denmark.....	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Uruguay	Gold	Peso.....	1.03,4	Gold—peso: silver—peso and divisions.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed.

† The gold standard was adopted October 1, 1892. (See CONSULAR REPORTS No. 147, p. 623.) Values are still, however, frequently expressed in the florin or gulden, which is worth 2 crowns or 40.6 cents.

‡ Gold standard adopted October 1, 1897. (See CONSULAR REPORTS No. 201, p. 259.)

§ See note to table of fluctuating currencies.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896–97, p. 234.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1896.				1897.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3	$0.41,2
Central America.	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3	.41,2
China	Amoy tael				.79,3	.76,7	.75,7	.71,7	.66,4
	Canton tael				.79	.76,5	.75,5	.71,5	.66,4
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6	.63,7
	Chinkiang tael				.77,4	.74,9	.73,9	.70	.65,1
	Fuchau tael				.73,3	.70,9	.70	.66,3	.61,6
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1	.67,8
	Hankau tael				.74,2	.71,7	.70,8	.67,1	.62,3
	Ningpo tael				.76,2	.73,7	.72,8	.68,9	.64
	Niuchwang tael.				.74,3	.71,9	.71	.67,2	.62,5
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5	.60,8
	Swatow tael				.73,2	.70,8	.69,9	.66,2	.61,5
	Takao tael				.79,8	.77,2	.76,2	.72,2	.67
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5	.64,6
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Ecuador	do	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1	.19,6
Japan	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5		
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2	.44,6
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2	.07,6
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Russia	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4		
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2				

Countries.	Monetary unit.	1898.				1899.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia	Silver boliviano.	$0.42,4	$0.40,9	$0.41,8	$0.43,6	$0.43,9	$0.43,4	$0.44,3
Central America	Silver peso	.41,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
China	Amoy tael	.68,5	.66,2	.67,6	.70,6	.71	.70,2	.71,6
	Canton tael	.68,3	.66	.67,4	.70,4	.70,8	.70	.71,4
	Chefoo tael	.65,5	.63,3	.64,6	.67,5	.67,9	.67,2	.68,4
	Chinkiang tael	.66,9	.64,6	.66	.69	.69,3	.68,6	.69,9
	Fuchau tael	.63,4	.61,2	.62,5	.65,3	.65,6	.65	.66,2
	Haikwan tael	.69,7	.67,3	.68,8	.71,8	.72,2	.71,4	.72,8
	Hankau tael	.64,1	.61,9	.63,2	.66	.66,4	.65,7	.67
	Ningpo tael	.64,3	.63	.65	.67,9	.68,2	.67,5	.68,8
	Niuchwang tael.	.65,9	.62	.63,4	.66,2	.66,5	.65,9	.67,1
	Shanghai tael	.62,6	.60,4	.61,7	.64,5	.64,8	.64,1	.65,4
	Swatow tael	.63,3	.61,1	.62,4	.65,2	.65,5	.64,9	.66,1
	Takao tael	.66	.66,6	.68	.71	.71,4	.70,7	.72
	Tientsin tael	.66,4	.64,1	.65,5	.68,4	.68,8	.68	.69,4
Colombia	Silver peso	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
Ecuador	do	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
India*	Silver rupee	.20,1	.19,1	.19,9	.20,7	.20,8	.20,6	.21
Japan	Silver yen							.49,8
Mexico	Silver dollar	.46	.44,4	.45,4	.47,4	.47,7	.47,2	.48,1
Persia	Silver kran	.07,8	.07,5	.07,7	.08	.08,1	.08	.08,2
Peru	Silver sol	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3

*The commercial value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Kwan	Japan	8.28 pounds.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¼ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.
Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

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TARIFF OF JAMAICA: EFFECT UPON TRADE.

I give below a careful statistical analysis of the new tariff of Jamaica. The criticisms in my report of last year, printed in Commercial Relations, 1896–97, volume 1, page 631, et seq., apply to this tariff as well, but with added force. That report was based on the tariff passed to carry out the reciprocity arrangement of 1892. In it, I showed the weight of burdens on American trade. I shall now show the enormous increase in those burdens under the new tariff—an increase prohibitive in some cases and almost so in others.

In Schedule A, I give a complete and detailed statement of the imports of Jamaica during the fiscal year ended March 31, 1898, prepared from the Government classification in the official blue book. It shows, in parallel columns, the imports from Great Britain, from the United States, and from all other countries combined. Opposite the imports of each article I place in separate columns the percentage of duty levied under the tariff from 1892 to 1898, or the so-called reciprocity tariff, and the percentage of duty levied by the present bill. The 12½ and 16⅔ percentages are the ad valorem rates of the two laws, respectively. The other percentages are those of the specific duties calculated upon the invoice values of the various goods. These percentages (of specific duties) in my report last year were based on the values of the goods landed here, including freight, insurance, etc. This was an advantage I gave in order to be fair in the extreme in my comparisons. It was, however, unnecessary. The ad valorem rates of the tariff, principally on English goods, are based on the values of the goods at the place of shipment; and in the comparisons of this report I have based the percentages of duty on American goods on the value at place of shipment, instead of on the value landed here. This will account for any apparent discrep-

ancies in my figures of last year and this. It will be at once seen that this is the fair comparison; for if the landed values were taken on the goods from Great Britain, the ad valorem percentages would be decreased by the addition of freight and insurance to first cost.

The imports of Jamaica are shown by Schedule A to be divided into the following classes and subclasses:

Class I. Live animals, food, drinks, and narcotics.

Class II. Raw materials:

(*a*) Textiles.

(*b*) Other.

Class III. Manufactured articles:

(*a*) Textiles.

(*b*) Metal.

(*c*) Other.

In Class I (live animals, food, drinks, and narcotics) the imports are preponderatingly from the United States, and the duties are principally specific, or rated, as called here. The entire schedule is dutiable, except live turtle from the West India Islands, birds and poultry, and seeds and grain for propagation, the imports of which are trifling. The imports from the United States, it will be seen, are nearly four times in value those from the United Kingdom and nearly two times those from Great Britain and all other countries combined. The bulk of the imports from "other countries" consists of animals and fish from Canada. A very careful calculation made from this schedule (excluding liquors and tobacco) gives the following average of duties paid on dutiable goods from the United States and Great Britain under this schedule:

From—	Dutiable imports.	Duties paid.	Average of duties.
			Per cent.
Great Britain	$457,018	$104,385.53	22⅞
United States	2,028,297	787,065.28	38⅞

In the class of food stuffs, therefore, the American goods pay almost double the duties paid by English goods. The importations of live animals, smoked fish and meats, and refined sugar are almost prohibited by the high rates; while those of butter and substitutes, cheese, dried and salted fish, lard and substitutes, salted or cured beef, hams, salted or cured pork, and cotton-seed oil are undoubtedly limited for the same reason.

I omit in the above calculation liquors and tobacco, as these are properly at all times and in all countries the subject of heavy taxation for revenue purposes, and should not be used for purposes of comparisons. But in this case, there are other reasons—first, they are not entirely the product of Great Britain, and, though coming

from there, are, in the first instance, brought largely from other countries; second, the duties being specific, the invoice values in the blue book are not reliable. Taking the returns as they are, however, including these items, the percentages would be: American, 41⅛; English, 36⅛.

In Class II (raw materials), the imports come from Great Britain in the proportion of two to one from all other countries, and the dutiable articles are all subject to the ad valorem rate of 16⅔ per cent. The bulk of the importations are coal (from Great Britain and the United States in the proportion of three to one), which is free. The only other item of heavy import is tallow and animal grease, practically all from the United States and paying a duty of 16⅔ per cent. The following table shows the dutiable imports and the percentage of duties thereof:

From—	Dutiable imports.	Duties paid.	Average of duties.
			Per cent.
Great Britain	$3,379	$563.17	16⅔
United States	24,568	4,094.67	16⅔

In striking contrast to Class I (food products) comes Class III (manufactures).

In subclass *a* (textile manufactures), the imports are from Great Britain in the proportion of more than ten to one from the United States. This proportion is almost maintained by Great Britain against all countries, not alone the United States. Yet, with the exception of bags and sacks, which are free because used as coverings for island produce exported and which are imported mostly from Great Britain, the entire class is subjected to the ad valorem rate of 16⅔ per cent, or less than half the percentage levied on the American goods in Class I. The comparison of these two schedules—food stuffs and textile manufactures—illustrates better than any other the injustice of the tariff. All the articles of textiles, with the exception of some of the cottons, are essentially those purchased by the better classes of the people, while the food stuffs constitute principally the necessaries of life for the poor man. The former pays an average duty of 16⅔ per cent; the latter 38⅛ per cent, or considerably more than double.

Here is the table of dutiable imports, duties, and percentages:

From—	Dutiable imports.	Duties paid.	Average of duties.
			Per cent.
Great Britain	$1,453,995	$242,332.50	16⅔
United States	125,265	20,877.50	16⅔

But the criticism does not cease at the textile manufactures. The British metal production must be looked after. The imports in subclass *b* (manufactures, metal) are nearly one and three-fourths times as large from Great Britain as from the United States, and more than one and a half times as large from Great Britain as all other countries. The bulk of the articles are for the better classes—corporations, merchants, and others—and yet, all the dutiable articles pay the ad valorem rate of 16⅔ per cent, the same as the textiles, as against 38⅛ per cent on American food stuffs.

The table on this schedule is:

From—	Dutiable imports.	Duties paid.	Average of duties.
			Per cent.
Great Britain	$291,694	$48,615.67	16⅔
United States	152,562	25,427.00	16⅔

Still continuing the manufactures, we find that in subclass *c* (miscellaneous manufactures), the imports from Great Britain are much larger than from all other countries. The vast bulk of the dutiable goods from Great Britain (in fact, everything, with the exception of soap, inconsiderable amounts of gunpowder and other explosives, candles, oils, and matches, and large importations of cement, which are taxed as low as 14⅜ per cent) is subject to the ad valorem rate of 16⅔ per cent, while nearly half the American imports pay duties ranging from 21¼ to 166 per cent. The large item of shooks, coming from the United States, is retained on the free list for the same reason as bags and sacks. Being used to cover island produce exported, to levy duties on them would increase the burden of the producers. A calculation of the average percentages on British and American goods in this schedule will show results similar to the others. It is as follows:

From—	Dutiable imports	Duties paid.	Average of duties.
			Per cent.
Great Britain	$820,499	$153,413.52	18⅔
United States	672,561	304,505.69	45¼

If we take the entire schedule of Class III (manufactures), the following will be disclosed:

From—	Dutiable imports.	Duties paid.	Average of duties.
			Per cent.
Great Britain	$2,566,188	$444,361.79	17⅜
United States	950,388	350,900.19	36⅞

We thus find that in the imports of food stuffs, provisions, etc., the percentage on American goods is 38⅛ per cent, against 22⅝ per cent on the British; while in manufactures, the percentage on American goods is 36 9/10 per cent against 17 3/10 per cent on British. It is apparent, therefore, that not only on American food stuffs are the heavy exactions laid, but that throughout the entire tariff American goods average a much higher rate of duty than British goods. To show the effect of the duties in the entire tariff and the preferential treatment of British goods, I make use of the following table:

Description.	From Great Britain.			From United States.		
	Dutiable imports.	Duties paid.	Average.	Dutiable imports.	Duties paid.	Average.
			Per cent.			*Per cent.*
Class I	$457,018	$104,385.53	22⅝	$2,028,297	$787,065.28	38⅛
Class II	3,379	563.17	16⅔	24,568	4,094.67	16⅔
Class III (*a*)	1,453,995	242,332.50	16⅔	125,265	20,877.58	16⅔
Class III (*b*)	291,694	48,615.67	16⅔	152,562	25,427.00	16⅔
Class III (*c*)	820,499	153,413.52	17 3/10	672,561	304,595.69	36 9/10
Total	3,026,585	549,310.39	18⅛	3,003,253	1,142,060.14	38

It will thus be seen that (excepting liquors and tobacco) the average percentage of duty paid on every dollar of the dutiable imports from the United States is 38 per cent, and on every dollar of dutiable imports from Great Britain 18¼ per cent. British goods pay little more than the ad valorem rate of the tariff throughout, while American goods pay twice as much, therefore furnishing two-thirds of the revenue from imports for the maintenance of the island.

If we add to these figures the liquors and tobacco in schedule Class I, the figures would be as follows:

Description.	From Great Britain.			From United States.		
	Dutiable imports.	Duties paid.	Average.	Dutiable imports.	Duties paid.	Average.
			Per cent.			*Per cent.*
Class I	$663,135	$244,120.35	33⅜	$2,112,857	$878,703.26	41⅝
Class II	3,379	563.17	16⅔	24,568	4,094.67	16⅔
Class III (*a*)	1,453,995	242,332.50	16⅔	125,565	20,877.00	16⅔
Class III (*b*)	291,694	48,615.67	16⅔	152,562	25,427.00	16⅔
Class III (*c*)	820,499	153,413.00	17 3/10	672,561	304,595.69	36 9/10
Total	3,232,702	689,045.21	21⅓	3,087,813	1,233,698.12	40

Showing 40 per cent on American goods and 21⅓ per cent on British.

The average of duties on the entire imports, including free goods, will be:

Description.	From Great Britain.			From United States.		
	Imports.	Duties paid.	Average.	Imports.	Duties paid.	Average.
			Per cent.			*Per cent.*
Class I	$663,135	$244,120.35	.....	$2,112,857	$878,703.26	.....
Class II	210,410	563.17	.....	93,324	4,094.67	.....
Class III (*a*)	1,472,874	242,332.50	.....	135,586	20,877.50	.....
Class III (*b*)	385,282	48,615.67	.....	237,262	25,427.00	.....
Class III (*c*)	893,892	153,413.52	.....	792,978	304,595.69	.....
Total	3,625,593	689,045.21	19	3,372,007	1,233,698.12	36⅔

Thus every dollar of imports into the island from the United States pays an average duty of 36⅔ per cent, and every dollar of British goods an average duty of 19 per cent.

The treatment that Jamaica receives in the market of the United States presents a strong contrast. I have not by me the data necessary to give figures as exact as I wish, but by allowing a liberal estimate they are sufficient for the purpose. The exports of Jamaican produce to the United States in the years 1897–98, as taken from the official blue book, were $4,288,739. Of these $2,999,693, or more than two-thirds, were admitted into the United States free. A careful estimate of the duties paid shows that the total volume of Jamaica produce was admitted into the United States market at an average of about 18 per cent. The average percentage levied on American goods in Jamaica is 36⅔ per cent.

The comparisons on this tariff do not, however, cease here. Up to this time, I have based them on the imports as a whole, and, while that answers all practical purposes, I will, in order to meet some of the claims put forth in its behalf, take the imports somewhat in detail. I shall first refer to the tables below to show the differentiation in favor of British goods. The first is a table giving in parallel columns the imports from Great Britain and the United States at various percentages of duty, including also those free of duty. It is as follows:

Description.	From Great Britain.	From the United States.
Free of duty	$393,121	$287,772
At less than 16⅔ per cent	70,219	37,675
At 16⅔ per cent	2,528,291	763,696
Total 16⅔ per cent or less	2,598,510	801,371
Over 16⅔ per cent but less than 20	130,108	83,878
Total less than 20 per cent	2,728,618	885,249
From 20 to 24 per cent	11,813	477,295

Description.	From Great Britain.	From the United States.
From 25 to 28 per cent	$136,448	$58,892
Total less than 30 per cent	2,876,879	1,421,436
From 30 to 34 per cent	97,570	44,960
Total less than 35 per cent	2,974,449	1,466,396
From 35 to 39 per cent	7,566	420,536
From 40 to 45 per cent	13,094	145,366
50 per cent	25,794	5,598
Total at 50 per cent or less	3,020,903	2,037,896
From 54 to 57 per cent	1,467	810,724
66⅔ per cent		51,246
73 per cent		456
100 per cent	4,179	4,632
165 per cent		96,901
Total dutiable	3,026,549	3,001,855

The lessons drawn from the above table are not inconsiderable, and are striking ones.

(1) The dutiable imports are about the same from Great Britain and the United States—about $3,000,000 from each.

(2) The free imports are largely from Great Britain.

(3) About $2,600,000, or somewhat more than five-sixths, of the dutiable imports from Great Britain pay but 16⅔ per cent or less; while of the dutiable imports from the United States only about $800,000, or somewhat more than one-fourth, pay these low duties.

(4) The imports from Great Britain paying the above low rate are more than three times those from the United States paying the same.

(5) Less than one-sixth the dutiable imports from Great Britain pay over 16⅔ per cent, while nearly three-fourths of those from the United States pay this percentage.

(6) Over $2,700,000, or nine-tenths, of the dutiable imports from Great Britain pay under 20 per cent; while less than $900,000, or three-tenths, of those from the United States are taxed at so low a rate.

(7) The imports from Great Britain paying under 20 per cent are more than three times those from the United States at similar rates.

(8) Less than one-tenth of the dutiable imports from Great Britain pay over 20 per cent, while more than seven-tenths of those from the United States pay that percentage.

(9) Nearly $2,900,000, or nineteen-twentieths, of the dutiable imports from Great Britain pay under 30 per cent; while but $1,400,000, or less than half, of those from the United States pay so little.

(10) The imports from Great Britain paying under 30 per cent are more than double those from the United States paying similar rates.

(11) Less than one-twentieth of the dutiable imports from Great Britain pay over 30 per cent, while more than half of those from the United States pay that percentage.

(12) About $50,000, or one-sixteenth, of the dutiable imports from Great Britain are taxed 35 per cent and upwards; while over $1,500,000, or more than one-half, of those from the United States are so taxed.

(13) Practically, all the dutiable imports from Great Britain come in under 35 per cent, but less than half of those from the United States come in under that rate.

(14) Less than $6,000, or but one five-hundredths, of the dutiable imports from Great Britain pay rates above 50 per cent; while nearly $1,000,000, or one-third, of those from the United States pay such rates.

(15) One-twentieth of the imports from the United States pay over 66⅔ per cent; nearly one-thirtieth pay 165 per cent.

These comparisons could go on ad infinitum, but the above are sufficient for all practical purposes of illustration.

The next tables, showing the preferential treatment of English goods, give the principal imports (above $10,000) from both countries, arranged in order of percentages. The double percentages are on different grades of goods.

Great Britain.

Articles.	Value.	Per cent.
Tea	$19,163	50
Salt	11,396	40
Soap	83,404	30
Rice	133,731	28
Condensed milk	128,663	17
Total above 16⅔ per cent	376,357	.....
Preserved fish	17,606	16⅔
Pickles, condiments, and confectionery	40,766	16⅔
Provisions, not enumerated	36,367	16⅔
Miscellaneous foods, etc	12,381	.....
Apparel and slops	190,400	16⅔
Cotton:		
Hosiery	22,456	16⅔
Piece goods	846,900	16⅔
Unenumerated	42,163	16⅔
Haberdashery, millinery, etc	146,506	16⅔
Felt hats	19,635	.....
Linen manufactures	14,811	.....
Silk manufactures:		
Broad stuffs	12,881	.....
Ribbons	18,236	.....
Woolen manufactures (all-wool cloths)	129,666	16⅔
Hardware and cutlery	98,214	16⅔
Iron:		
Galvanized	17,727	16⅔
Roofing, galvanized	31,972	16⅔
Tubes and pipes	20,358	16⅔
Standard and wire fencing	16,608	16⅔
Manufactures, miscellaneous	50,530	16⅔

Great Britain—Continued.

Articles.	Value.	Per cent.
Tin plates and sheets	$11,992	16⅔
Chemical preparations	13,167	16⅔
Earthenware tubes and pipes	29,966	16⅔
Earthen tubes and pipes	10,114	16⅔
Household furniture	13,881	16⅔
Straw hats	48,634	16⅔
Boots and shoes	149,746	16⅔
Drugs and medicines	57,682	16⅔
Painters' colors and materials	17,803	16⅔
Paper manufactures	26,527	16⅔
Saddlery and harness	20,736	16⅔
Miscellaneous manufactures	132,478	16⅔
Cement	63,265	16⅔
Coal and coke	207,021	Free.
Bags and sacks	18,871	Free.
Agricultural implements	22,677	Free.
Agricultural machinery and steam engines	57,268	Free.
Books and printed matter	54,216	Free.
Chemical manures	17,102	Free.

United States.

Articles.	Value.	Per cent.
Petroleum (kerosene oil)	$96,901	165
Cotton-seed oil	51,246	66⅔
Butter substitutes	31,874	57
Flour	778,850	54 to 70
Cypress shingles	25,562	44
Salt pork	110,708	40
Pitch pine	125,478	38⅔ to 53⅓
Hams	33,339	38 to 65⅓
Salt beef	85,191	36½
Bread and biscuit	163,601	36
Lard and substitutes	12,927	35⅔
Cheese	27,655	33½
Rice	31,447	28
Pickled alewives	13,660	26⅔
Corn meal	92,489	23½
Pickled herrings	16,866	22½
Butter	77,757	22¼
White pine	51,443	21⅛ to 30¼
Salt fish	188,142	21
Horses, mares, geldings, and mules	50,598	20
Potatoes	18,815	19
Corn	14,781	18⅛
Oats	32,878	17½
Condensed milk	105,555	17
Farinaceous substances	13,723	16⅔
Preserved fish	13,912	16⅔
Hay, straw, and forage	13,868	16⅔
Canned beef and pork	13,979	16⅔
Provisions, not enumerated	13,066	16⅔
Pickles, condiments, etc	16,108	16⅔
Tallow and animal grease	23,509	16⅔
Wearing apparel and slops	20,044	16⅔
Cotton piece goods	87,307	16⅔

United States—Continued.

Articles.	Value.	Per cent.
Hardware and cutlery	$38,368	16⅔
Nails, screws, and rivets	15,247	16⅔
Wire fencing and iron standard	26,657	16⅔
Bicycles and parts	31,577	16⅔
Carriages	14,121	16⅔
Carts, wagons, and barrows	15,417	16⅔
Household furniture, not iron or brass	19,702	16⅔
India rubber and manufactures	10,460	16⅔
Boots and shoes	66,264	16⅔
Drugs and medicines	41,869	16⅔
Paper manufactures	29,987	16⅔
Wood manufactures	14,019	16⅔
Miscellaneous manufactures	49,616	16⅔
Pease and beans	30,366	16
Coal and coke	66,719	Free.
Bags and sacks	10,321	Free.
Electric-light apparatus	16,747	Free.
Agricultural implements	12,760	Free.
Machinery and steam engines	34,508	Free.
Books and printed matter	10,861	Free.
Shooks	97,273	Free.

Now, it is claimed by those who defend the tariff of Jamaica that the food stuffs are the heavy imports, and therefore the large duties are put on them to get the revenue. These claims would undoubtedly be a good defense if they were consistent with facts; but I think I shall show by some other comparisons that they are not consistent, and that the revenue could be as well raised without burdening food stuffs so heavily. To do this, I shall first show some of the principal imports from Great Britain and the United States, in order of their value and percentages:

Great Britain.

Articles.	Value.	Per cent.
Cotton manufactures	$911,915	16⅔
Apparel and slops	190,400	16⅔
Boots and shoes	149,746	16⅔
Haberdashery, millinery, etc	146,506	16⅔
Woolen manufactures	133,896	16⅔
Rice	133,731	28
Iron manufactures	132,489	16⅔
Miscellaneous manufactures	132,478	16⅔
Condensed milk	128,663	17
Hardware and cutlery	98,214	16⅔
Soap	83,804	30
Cement	63,265	14⅔
Straw hats	48,634	16⅔
Pickles, condiments, and confections	40,766	16⅔
Earthenware and earthenware pipes	40,080	16⅔
Silk manufactures	32,320	16⅔
Saddlery and harness	20,736	16⅔
Hats, felt	19,635	16⅔
Tea	19,163	50
Painters' colors, etc	17,803	16⅔
Linen manufactures	14,811	16⅔

United States.

Articles.	Value.	Per cent.
Flour	$778,850	54 to 70
Salt fish	188,142	21
Bread and biscuit	163,601	36
Pitch pine	125,478	38⅓ to 53⅓
Salt pork	110,708	40
Kerosene oil	96,901	165
Corn meal	92,489	23¾
Salt beef	85,191	36½
Butter	77,757	22¼
White pine	51,443	21¼ to 30¾
Cotton-seed oil	51,246	66⅔
Horses, mares, geldings, and mules	50,598	20
Hams	33,339	38 to 65⅓
Oats	32,878	17½
Butter substitutes	31,874	57
Pickled fish	30,757	22⅝ to 26⅔
Pease and beans	30,366	16
Cheese	27,655	33½
Shingles, cypress	25,562	44
Tallow and animal grease	23,509	16⅔
Potatoes	18,815	19
Corn	14,781	18⅛
Lard and substitutes	12,927	35⅔

Some of the questions which naturally present themselves upon this schedule are: If the revenue is to be raised from the heavier imports, how is it that flour pays three times as much as cotton manufactures pay; salt fish and bread and biscuits so much more than apparel and slops; pitch pine double as much as boots and shoes and haberdashery and millinery; kerosene ten times as much as iron, woolen, and miscellaneous manufactures; corn meal and butter almost half as much again as condensed milk; salt beef twice as much as hardware and cutlery and considerably more than soap; cotton-seed oil, white pine, and horses, mares, geldings, and mules so heavily, and cement so little; hams and oats more than straw hats; butter substitutes, pickled fish, and cheese vastly more than pickles and confectionery; cheese and shingles more than earthenware and silk manufactures; potatoes, corn, and lard substitutes more than saddlery, felt hats, painter's colors and materials, and linen manufactures?

If the idea is to tax the laboring population (mostly negroes) through duties on food stuffs, why do flour, bread and biscuits, lumber, butter, animals, hams, pickled fish, cheese, shingles, etc., pay such high duties? Certainly, those people do not use such articles.

This tariff almost without exception levies enormous duties on the necessaries of life and allows the luxuries to enter at low rates.

Haberdashery and millinery, iron, woolen, silk, and linen manufactures, hardware and cutlery, cement, hats, confectionery, saddlery and harness, etc., come in at a low rate, while almost every provision pays an enormous duty. Almost the entire bulk of the former is used by the better classes, who can afford to pay a heavier duty, and would pay it, rather than do without the articles. This tariff also levies enormous duties on articles that are admitted into Great Britain free or at a low rate. Recently Mr. Thomas McNish, a well-known merchant in Kingston, published several letters on the subject of this tariff, and I think the facts mentioned by him are well worth embodying in this report. In a letter to the British commissioner, Sir David Barbour, he gave a table of duties on twenty-two items—necessaries or plain food stuffs—levied in Great Britain, Barbados, and Jamaica, and the contrast is startling. He shows that the British workman, with an average of 20s. to 30s. wages per week, gets all of these articles free, with the exception of tea, while the Jamaican, with an average of 5s. per week, pays enormous duties. Here are his figures:

Articles.	Great Britain.	Barbados.	Jamaica.
		£ s. d.	£ s. d.
Flour.....per barrel of 196 pounds...	Free.....	0 4 2	0 8 4
Crackers.....per 100 pounds...	.....do.....	0 1 0	0 4 2
Corn meal.....per barrel...	.....do.....	0 1 3	0 4 0
Hams.....per 100 pounds...	.....do.....	0 4 2	0 16 8
Lard.....do.....	.....do.....	0 4 2	0 8 4
Butter.....do.....	.....do.....	0 8 4	0 16 8
Oleomargarine.....do.....	.....do.....	0 4 2	0 16 8
Matches.....per gross (boxes of 100 sticks)...	.....do.....	0 1 0	0 4 0
Kerosene.....per 100 gallons...	.....do.....	1 18 4	2 13 6½
Salt beef.....per 100 pounds...	.....do.....	0 4 2	0 7 6
Salt pork.....do.....	.....do.....	0 4 2	0 7 6
Sausages.....do.....	.....do.....	0 4 2	0 16 8
Bacon.....do.....	.....do.....	0 4 2	0 16 8
Mutton, frozen.....	.....do.....	20 per ct.	0 7 3½
Tea.....per pound...	3d.....	0 0 3	0 1 0
Rice.....per 100 pounds...	Free.....	0 1 0	0 3 0
Cheese.....do.....	.....do.....	0 8 4	0 8 4
Salt fish.....do.....	.....do.....	0 1 6	0 3 6
Salt.....	.....do.....	0 3 0	1 2 5
Soap.....per 100 pounds...	.....do.....	0 1 6	0 5 6
Salmon.....per 200 pounds...	.....do.....	0 4 2	0 10 6
Herrings.....do.....	.....do.....	0 1 3	0 4 0

The following table, which I have prepared to show the inequalities of the Jamaican tariff, will give in parallel columns some of the necessaries of life and luxuries or goods for better classes, with the percentages of duty levied on them:

Necessaries.		Higher grade goods for better classes.	
Articles.	Per cent.	Articles.	Per cent.
Kerosene	165	Tea	50
Cotton-seed oil	66⅔	Condensed milk	17
Butter substitutes	57	Ale and beer	21
Flour	54	Pickles, condiments, and confectionery	16⅔
	70	Haberdashery and millinery	16⅔
Salt pork	40	Linen manufactures	16⅔
Pitch pine	38⅔	Saddlery and harness	16⅔
	53⅓	Silk manufactures	16⅔
Salt	40	Cement	14⅜
Salt beef	36½	Iron manufactures	16⅔
Soap	30	Woolen manufactures	16⅔
Corn meal	23¼		
Salt fish	21		

In the face of these facts, it can hardly be denied that the colonial tariffs of Great Britain, of which the Jamaica tariff is an extreme illustration, have for a policy the maintenance of a market for the British manufacturer. Revenue is raised by heavy duties on food stuffs from America, and the imports are thereby restricted; per contra, British manufactures are let in at low duties and the imports in these lines kept high. Some illustrations of the preferential treatment of British goods in Jamaica are not amiss here. Condensed milk is the only article of food, except rice, imported to any extent from England. The value of imports in this line is only exceeded by three articles of food from the United States, viz, flour, salt fish, and biscuits. Yet, with the exception of a much smaller quantity of pease and beans, there is no food stuff from the United States which pays so low a duty as condensed milk—17 per cent. Cement is brought entirely from England. It pays the low duty of 14⅜ per cent. Other building materials, coming from the United States, pay very heavy duties. Galvanized-iron roofing from England pays 16⅔ per cent, while American shingles pay 44 per cent. English pickles, sauces, condiments, confectionery, etc., pay 16⅔ per cent. American sausages and other meats pay over 30 per cent. English beer and ale pay the duty of 21 per cent and American salt pork 40 per cent; both are imported in nearly equal quantities; the former is a luxury and the latter a necessary of life.

The defenders of this tariff say that they must raise revenue in the present condition of the colony. They ignore the fact that the heavy burdens on goods cut down the imports and restrict trade.

They persistently decline to put heavier duties on the articles consumed by the better classes, whose imports, and consequently the revenue, would not be affected by the increased duties. Certainly, the American exporter of food stuffs and provisions has everything to complain of in the tariff of Jamaica.

LOUIS A. DENT,
Consul.

KINGSTON, *May 30, 1899.*

SCHEDULE A.

Articles.	Imports in 1897–98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS I.—*Live animals, food, drinks, and narcotics.*					
Animals, living:				*Per cent.*	*Per cent.*
Cattle, neat	$2,248	$3,959	$4,494	Free.	25
Horses, mares, and geldings	3,504	28,148	1,569	Free.	20
Mules		22,450	3,348	Free.	20
Sheep	469		10,716	Free.	25
Swine		39	123	Free.	50
Turtle			22,595	Free.	Free.
Beer and ale	128,824	22,093	3,013	21	21
Birds, including poultry	14	2,834	320	Free.	Free.
Biscuit and bread	1	163,601	132	26	36
Bran, middlings, and shorts				Free.	16⅔
Butter	8,175	77,757	8,849	11⅛	22¼
Oleomargarine and other substitutes for butter	1,454	31,874		28½	57
Cheese	1,932	27,655	1,263	16¾	33½
Cocoa		390		12½	16⅔
Corn, grain, meal, flour, etc.:					
Flour or wheat meal	13	778,850	1,768	54 70	54 70
Maize or indian corn		14,781	13	13⅜	18¼
Maize or indian-corn meal		92,489		17½	23¼
Oatmeal	2,652	342	31	12½	16⅔
Oats	930	32,878	492	13⅛	17½
Pease and beans	28	30,366	22	11	16 20
Cotton seed and other prepared food for animals	510	2,968	71	Free.	16⅔
Eggs	6	226	29	Free.	16⅔
Farinaceous substances:					
Starch, corn	133	5,263		Free.	17¾
Other descriptions	4,104	13,723	1,047	12½	16⅔
Fish:					
Alewives, pickled		13,660	37,238	16¼	26⅓
Dried or salted	108	188,142	377,430	21	21
Fresh	530	6	10	Free.	16⅔
Herrings—					
Pickled	26	16,866	73,644	14⅔	22⅛
Smoked		1,209	3,306	41⅔	41⅔
Mackerels, pickled		7,236	16,396	12	10⅔
Oysters, preserved in cans	24	970		Free.	16⅔
Pickled, not enumerated		231	21	30	26⅔
Preserved, other than by salting	17,606	13,912	476	12½	16⅔

SCHEDULE A—Continued.

Articles.	Imports in 1897-98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS I.—*Live animals, food, etc.*—Cont'd.					
Fish—Continued.					
Salmon—				*Per cent.*	*Per cent.*
Smoked	.....	$26	$21	44½	44½
Wet salted or cured	.....	1,586	11.005	18¾	18¾
Fruit, fresh:					
Apples and other	$121	2,877	61	Free.	16⅔
Preserved	1,815	2,493	22	12½	16⅔
Dried	5,423	6,133	31	Free.	16⅔
Hay and straw for forage	.....	13,868	32	Free.	16⅔
Lard and substitutes	33	12,927	44	13⅓	35⅔
Meats:					
Bacon	2,107	4,087	15	16¼	33½
Beef—					
Smoked and dried	22	2	.....	Free.	16⅔
Wet salted or cured	8	85,191	1	27	36½
Beef and pork, preserved in cans other than by salting	106	13,979	22	Free.	16⅔
Fresh	1,518	1,670	13	Free.	16⅔
Hams	7,403	33,339	24	19 / 32⅔	38-65⅓
Pork, wet, salted, cured	.....	110,708	25	30	40
Sausages, dried and pickled	94	261	89	33⅓	33⅓
Salted or cured, unenumerated	.....	57	.....	30	30
Tongues—					
Dried or smoked	8	4,089	.....	Free.	25
Salted or cured	.....	5,506	.....	25	25
Milk, condensed	128,663	10,555	264	12½	17
Oil for food:					
Cotton seed or cottolene	.....	51,246	.....	Free.	66⅔
Olive	6,505	2	19	5	5
Salad	300	24	.....	6⅔	6⅔
Pickles, vinegar sauces, condiments, and confectionery	40,766	16,108	2,046	12½	16⅔
Provisions, not otherwise enumerated	36,367	13,066	925	12½	16⅔
Rice	133,731	31,447	31,553	28	28
Salt	11,396	1,875	16,952	40	40
Rock	598	.....	.....	Free.	50
Seed and grain of all kinds for propagation	217	744	6	Free.	Free.
Spirits:					
Brandy	10,156	66	501	125	160
Gin	2,767	11	.....	250	320
Whisky	25,712	2,965	76	178	225
Spirituous compounds, including spirits of wine, alcohol, cordials, etc	1,710	363	652	110	133⅓
Sugar:					
Molasses, treacle sirup, and glucose	1,791	4,528	.....	Free.	16⅔
Refined	1,698	5,986	1,491	44½	44½
Tea	19,163	1,702	973	50	50
Tobacco:					
Cigarettes	9,250	30,949	23	60	66⅔
Cigars	18	47	79	33⅓	33⅓
Manufactured	2,233	14,793	30	160	213⅓
Unmanufactured	150	8,462	322	225	300
Vegetables, fresh (potatoes)	382	18,815	6,590	Free.	19

SCHEDULE A—Continued.

Articles.	Imports in 1897-98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS I.—*Live animals, food, etc.*—Cont'd.					
Wines:				*Per cent.*	*Per cent.*
Burgundy	$6	$11	$3	141	141
Do	14	.....	.....	33⅓	33⅓
Champagne	113	.....	11	43	43
Do	4,821	.....	457	25	25
Claret	1,712	242	779	100	100
Do	199	36	101	33⅓	33⅓
Falernian	46	.....	11	58	58
Hock	101	53	136	87½	87½
Do	36	.....	117	33⅓	33⅓
Madeira	92	.....	2	87½	87½
Do	92	.....	.....	36	36
Malaga	5	.....	.....	70	70
Marsala	191	19	.....	87½	87½
Mistilla	29	.....	.....	70	70
Moselle	10	.....	19	70	70
Do	29	.....	19	33⅓	33⅓
Muscatel	131	.....	1	35	35
Port	5,524	1,156	158	70	70
Do	528	10	209	35	35
Prune	22	.....	.....	70	70
Red	8,460	416	415	70	70
Do	92	2	97	27	27
Sherry	1,947	637	49	100	100
Do	424	.....	41	34	34
Vermuth	352	.....	.....	100	100
White	90	50	42	70	70
Yeast cake and baking powder	166	575	.....	Free.	16⅔
All other articles not enumerated in the foregoing list and not properly falling under any of the general heads (manufactured)	12,381	2,178	287	12½	16⅔
Total	663,135	2,112,857	645,277	.....	.....
CLASS II (*a*).—*Raw materials (textiles).*					
All articles not enumerated and not properly falling under any of the general heads	556	238	.....	12½	16⅔
CLASS II (*b*).—*Raw materials (other).*					
Coal and coke	207,021	66,719	1,812	Free.	Free.
Hides, raw	.....	.....	70	Free.	16⅔
Hops	372	661	221	12½	16⅔
Manure (guano and natural fertilizers)	.....	.....	37	Free.	Free.
Specimens illustrative of natural history	.....	16	11	Free.	Free.
Tallow and animal grease	1,820	23,509	.....	Free.	16⅔
Tortoise shell	.....	38	4,752	Free.	Free.
Trees, plants, and vines for propagation and cultivation	10	1,983	82	Free.	Free.
All other articles not enumerated in the foregoing list and not properly falling under any of the general heads (unmanufactured)	622	60	66	12½	16⅔
Do	9	100	5,571	Free.	16⅔
Total	209,854	93,086	12,622	.....	.....

SCHEDULE A—Continued.

Articles.	Imports in 1897–98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS III (*a*).—*Manufactured articles (textiles).*				*Per cent.*	*Per cent.*
Apparel and slops	$190,400	$20,044	$3,555	12½	16⅔
Bags and sacks (flax, hemp, and jute)	18,879	10,321	881	Free.	Free.
Cottons:					
Hosiery of cotton or cotton mixed with other materials	22,456	469	5,293	12½	16⅔
Manufactures, piece goods, including handkerchiefs and shawls	846,900	87,307	3,991	12½	16⅔
Unenumerated	42,163	778	4,422	12½	16⅔
Haberdashery and millinery, including embroidery and needlework (comprehending all minor articles used in the making up of apparel, etc., of mixed or undescribed materials and not capable of being accurately allotted to the separate heads of cotton, linen, silk, or woolen manufactures	146,506	7,873	4,577	12½	16⅔
Hats, felt	19,635	221	1	12½	16⅔
Linen manufactures (piece goods)	14,811	731	103	12½	16⅔
Silk manufactures:					
Broad stuffs of silk or satin	12,881	74	70	12½	16⅔
Handkerchiefs, scarfs, and shawls	228	19	8	12½	16⅔
Ribbons of all kinds	18,236	259	1,999	12½	16⅔
Unenumerated	975	.....	91	12½	16⅔
Woolen and worsted manufactures:					
Cloths, all wool	129,666	5,401	2,590	12½	16⅔
Cloths mixed with other materials	4,202	57	.....	12½	16⅔
Unenumerated	28	.....	.....	12½	16⅔
All other articles not enumerated in the foregoing lists and not properly falling under any of the general heads	4,908	2,032	192	12½	16⅔
Total	1,472,874	135,586	27,773	.....	.....
CLASS III (*b*).—*Manufactured articles (metals).*					
Ammunition (percussion caps)	594	171	9	12½	16⅔
Arms:					
Muskets, rifles, and fowling pieces	1,675	575	113	12½	16⅔
Revolvers	79	380	10	12½	16⅔
Bridges of iron	653	.....	.....	Free.	16⅔
Clocks and watches, and parts thereof	2,390	2,279	1,956	Free.	16⅔
Electric-lighting apparatus of metal or parts thereof, except steam engines	830	16,747	65	Free.	Free.
Hardware and cutlery, unenumerated, comprising those articles which can not be allotted to the several headings of brass, copper, implements, iron, steel, etc.	98,214	38,368	2,245	12½	16⅔
Implements and tools, and parts thereof:					
Agricultural, including axes, billhooks, cutlasses, diggers' forks, grass knives, hatchets, hoes, picks, shovels, and spades	22,677	12,760	31	Free.	Free.
Unenumerated	1,993	1,400	152	12½	16⅔

SCHEDULE A—Continued.

Articles.	Imports in 1897-98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS III (*b*).—*Manufactured articles (metals)*—Continued.					
Machinery and millwork, and parts thereof, other than belting:					
Steam engines—				*Per cent.*	*Per cent.*
Agricultural	$40,477	$5,190	$1,353	Free.	Free.
Other descriptions	12,108	13,561	1,028	Free.	Free.
Not being steam engines, agricultural	1,387	5,181	124	Free.	Free.
Other descriptions	3,296	10,576	.....	Free.	Free.
Pumps	1,576	2,707	9	Free.	16⅔
Sewing machines	1,191	2,903	877	Free.	Free.
Stills and parts	246	327	.....	Free.	Free.
Metals:					
Brass, manufactures of	1,367	104	.....	12½	16⅔
Copper—					
Unwrought	1,195	8	.....	12½	Free.
Wrought or manufactured:					
Mixed or yellow metal	2,009	1,148	.....	12½	16⅔
Unenumerated	2,866	158	.....	12½	16⅔
Crucibles and pots of all kinds for melting	25	.....	.....	Free.	16⅔
Iron and steel, manufactures thereof, not being hardware or cutlery—					
Anchors, grapnels, chains, and cables	2,066	219	.....	12½	16⅔
Bar, not for railway purposes	4,751	551	.....	12½	16⅔
Cast and manufactures thereof, unenumerated	9,761	3,557	.....	12½	16⅔
Doors and shutters and every kind of iron-roofing doors and shutters	2,532	623	.....	Free.	16⅔
Galvanized	17,727	932	.....	Free.	16⅔
For roofing	31,972	2,050	.....	Free.	16⅔
Gas fixtures, including stores and all apparatus for generating, storing, or measuring gas or water	5,807	119	9	Free.	Free.
Hoops and hoop iron	7,099	409	.....	12½	16⅔
Hoop staples and nails for wire fencing	957	2,473	.....	Free.	16⅔
Nails, screws, and rivets	6,861	15,247	409	12½	16⅔
Pans for boiling sugar	2,099	200	.....	Free.	16⅔
Railroad:					
Rails, iron or steel	58	7,137	.....	Free.	Free.
Unenumerated	2,621	9,686	.....	Free.	Free.
Sheets and boiler plates	130	.....	.....	Free.	16⅔
Tin plates and sheets	11,992	2,158	.....	Free.	16⅔
Tin, unwrought	755	497	.....	Free.	Free.
Tubes and pipes	20,358	8,895	.....	Free.	16⅔
Wire fencing, also iron standards	16,608	26,657	65	Free.	16⅔
Wire of iron or steel	1,604	720	30	12½	16⅔
Wrought or manufactures thereof, unenumerated	12,580	745	10	12½	16⅔
Steel—					
Bars of all kinds	2,547	543	.....	12½	16⅔
Manufactures of steel or steel and iron combined	882	640	.....	12½	16⅔

SCHEDULE A—Continued.

Articles.	Imports in 1897–98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS III (*b*).—*Manufactured articles (metals)*—Continued.					
Metals—Continued.					
Lead—				*Per cent.*	*Per cent.*
Pig	$940	$8		Free.	Free.
Rolled sheet, piping, tubing, and other manufactures	1,714	29		Free.	16⅔
Zinc, manufactures of	176	21		Free.	16⅔
Metals and manufactures, unenumerated	4,630	1,468	$522	12½	16½
Plate:					
Silver	2,932	466	79	12½	16⅔
Plated and gilt ware	5,091	1,559	398	12½	16⅔
Printing presses, types, rules, spaces, and all accessories for printing	3,014	1,350	6	Free.	16⅔
Telegraphic and telephonic wire and apparatus	3,534	2,189	10,950	Free.	16⅔
Bicycles and parts	4,636	31,577	751	12½	16⅔
Total	385,282	237,262	21,201		
CLASS III (*c*).—*Manufactured articles (other)*.					
Alkali (soda and subsoda)	8,049	2,284	7	Free.	16⅔
Ammunition:					
Gunpowder	2,257			100	100
Rockets and other combustibles for purposes of war, explosives, and ammunition not otherwise described	1,433	4,572	182	12½	100
Asbestus and tar paper for roofing	110	150		Free.	16⅔
Boats and lighters	1,755	1,320	929	Free.	16⅔
Books, bound or unbound, pamphlets, newspapers, and printed matter in all languages	54,216	10,861	2,703	Free.	Free.
Brooms, brushes, and whisks of broom straw	7,186	1,895	242	Free.	16⅔
Candles:					
Tallow		1,333		Free.	50
Other descriptions	6,033	2,524		50	50
Carriages:					
For pleasure	1,511	14,121	442	12½	16⅔
Carts, wagons, cars, and barrows, with or without springs, not being such as are ordinarily used as vehicles of pleasure	1,659	15,417		Free.	16⅔
Cement	63,265	47	20	12½	16⅔
Chemical products or preparations not specially enumerated	13,167	7,820	1,004	12½	16⅔
Clay manufactures (brick, not bath brick)	5,345	621	214	Free.	16⅔
Cordage, cable ropes, and twine of hemp or like materials	5,447	6,550	1,271	12½	16⅔
Drawings, engravings, lithographs, and photographs	66	95	98	Free.	16⅔
Earthenware, etc., and chinaware, porcelain, etc	29,966	6,039	2,154	12½	16⅔
Tubes and pipes	10,114			Free.	16⅔
Electric-lighting apparatus or parts thereof, except steam engines		3,384		Free.	Free.
Fishing apparatus of all kinds	6,158	862		Free.	16⅔

SCHEDULE A—Continued.

Articles.	Imports in 1897–98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS III (*c*)—*Manufactured articles (other)*—Continued.					
Furniture (household), cabinet and upholstering wares, including looking-glasses and mirrors, framed (except bedsteads or other household furniture of iron or brass)	$13,881	$19,702	$1,712	*Per cent.* 12½	*Per cent.* 16⅔
Glass:					
Bottles	5,618	1,030	1,519	Free.	16⅔
Other manufactures	8,503	7,082	1,240	12½	16⅔
Hats:					
Straw	48,634	200	16	12½	16⅔
Unenumerated	6,992	221	3	12½	16⅔
India-rubber and gutta-percha goods, including waterproof clothing made wholly or in part thereof	9,652	10,460	493	Free.	16⅔
Instruments and apparatus, surgical, anatomical, scientific	3,361	3,305	484	12½	16⅔
Lamps and lanterns, not exceeding 10s. in value	2,144	6,217	104	Free.	16⅔
Leather (tanned, tarred, or dressed):					
Unwrought	9,586	4,650	193	12½	16⅔
Wrought, viz, boots and shoes	149,746	66,264	2,923	12½	16⅔
Other articles, unenumerated	9,765	1,773	325	12½	16⅔
Lime of all kinds	1,232	133	.....	Free.	16⅔
Lucifers and vesta matches, per gross of 12 dozen boxes, each 100 sticks	489	60	.....	166	100
Machinery belting of leather, canvas, or india rubber	728	343	.....	Free.	16⅔
Manures, including sulphate of ammonia and other chemical manures	17,102	7,178	1,973	Free.	Free.
Marble or alabaster, worked or carved for building purposes or monuments	2,321	1,156	102	Free.	16⅔
Medicines, drugs, and medicinal preparations of all kinds, including patent or proprietary medicines	57,682	41,869	9,685	Free.	16⅔
Oils, other than essential or medicinal	9,335	901	196	30	30
Oils for illuminating:					
Colza	154	35	.....	30	30
Paraffin	9	.....	.....	30	30
Petroleum	.....	96,901	.....	150	165
Oil for machinery:					
Car journal	.....	103	.....	33⅓	33⅓
Cylinder	17	35	.....	33⅓	33⅓
Engine	518	1,830	.....	33⅓	33⅓
Olive	149	.....	.....	7½	7½
Palm	118	.....	207	37½	37½
Painters' colors and materials	7,803	7,898	1,017	12½	16⅔
Paper:					
Hanging	713	3	.....	Free.	16⅔
Pasteboard, millboard, cardboard, and cards	909	531	2	Free.	16⅔
Unenumerated	15,925	27,140	1,262	Free.	16⅔
Writing and envelopes	8,980	2,313	188	Free.	16⅔
Perfumery:					
With over 42 per cent of spirits	5,754	5,034	1,895	30	16½
Other descriptions, with less than 42 per cent of spirits	9,005	4,090	1,343	12½	16⅔

SCHEDULE A—Continued.

Articles.	Imports in 1897-98.			Duty.	
	Great Britain.	United States.	Other countries.	Former.	Present.
CLASS III (*c*)—*Manufactured articles (other)*—Continued.				*Per cent.*	*Per cent.*
Photographic apparatus and chemicals	$1,785	$1,377	.....	Free.	Free.
Pictures	374	524	$273	Free.	16⅔
Pitch and tar	839	526	.....	Free.	16⅔
Printers' ink and colors	39	543	.....	Free.	16⅔
Resin and rosin	135	2,883	.....	Free.	16⅔
Saddlery and harness	20,736	4,485	76	12½	16⅔
Soap	83,404	9,994	157	30	30
Stationery, other than paper	5,397	1,945	59	12½	16⅔
Stones and slabs:					
Slate and talc	932	2,710	.....	Free.	16⅔
Grindstones, millstones, and others	1,943	103	123	12½	16⅔
Sulphur	51	18	.....	Free.	16⅔
Turpentine	121	2,481	.....	Free.	16⅔
Umbrellas and parasols	4,279	111	62	12½	16⅔
Varnish not containing spirits	1,587	2,257	128	Free.	16⅔
Wood and lumber:					
Hoops	289	344	.....	Free.	Free.
Houses	.....	201	259	Free.	16⅔
Manufactures of, not otherwise enumerated	4,677	14,019	5,237	12½	16⅔
Pitch pine, rough or prepared	3	125,478	254	38⅔	38⅔ / 53⅓
Shingles:					
Boston chips	.....	456	702	73	73
Cypress	.....	25,562	.....	44	44
Shooks, tierce, puncheon, and hogshead, and all descriptions of shooks; also tierces, hogshead, and casks	1	97,273	3,528	Free.	Free.
White pine, rough or prepared	.....	51,443	4,702	21¼	21¼ / 30¼
All other articles not enumerated in the foregoing list and not properly falling under any of the general heads (manufactured)	132,478	49,616	7,917	12½	16⅔
Do	260	277	397	Free.	16⅔
Total	893,892	792,978	60,022	.....	.....

TRADE IN THE ARGENTINE REPUBLIC: IMPORTS FROM UNITED STATES.

The Statistical Bulletin covering the imports and exports of the Argentine Republic for the first three months of the present year has just been issued.

The figures given show a highly encouraging development in the volume of our exportations to this country and also a marked decrease in the extent of our purchases of Argentine products.

In order that the ratio of increase or decrease shown in the trade of all the principal countries may be seen at a glance, I have prepared the following table, covering both imports and exports. The

values given are for the first three months of the present year, and are in Argentine gold. (The Argentine dollar equals 96½ cents in United States currency.)

*Increase or decrease in the imports and exports of the Argentine Republic for the first quarter of the calendar year 1899, as compared with the same period in 1898.**

Country.	Imports.		Exports.	
	Increase.	Decrease.	Increase.	Decrease.
England	$1,786,777			$1,940,032
Germany	384,977		$1,615,664	
Belgium		$54,658	1,274,386	
Brazil		132,954	257,965	
Spain		269,825	249,422	
United States	1,616,759			158,211
France	120,713		2,673,473	
Italy	324,658			269,597
Chile				508,061

This increase in the trade of the United States with this country has been generally commented upon by the press of this city. The Argentine press have used the figures showing our decreased purchases here, given out by the Bulletin, as an argument in support of the well-known Argentine contention that our wool tariff operates unjustly against the wools of this Republic. In an editorial commenting upon the figures given in the Bulletin, one of the English papers of this city says:

It will be noticed that the increase in the import trade is equally divided between England and the United States, all other nations remaining practically stationary,

*A report from Consul Mayer, of Buenos Ayres, dated May 9, 1899, in regard to Argentine trade in the first quarter of 1899, gives figures in full of the imports by countries, as follows:

From—	First quarter—	
	1898.	1899.
Germany	$3,300,716	$3,685,693
West Indies	7,000	4,275
Belgium	3,561,985	2,507,327
Bolivia	6,457	7,556
Brazil	1,173,924	1,040,970
Chile	7,341	19,082
Spain	915,567	645,742
United States	1,896,327	3,513,086
France	2,706,925	2,827,638
Italy	3,373,586	3,698,244
Holland	18,445	27,356
Paraguay	345,705	292,607
Portugal	21,348	23,733
United Kingdom	9,596,771	11,383,548
Uruguay	119,892	129,607
Other countries	28,207	14,598
Total	26,080,196	29,821,072

not excluding Germany, about whose increase of commerce we hear so much. It is evident that this increase is at least not shown with this country, in so far as Argentine statistical returns show. The increase in the import trade from the United States is very noticeable, it being almost double, despite the fact that the increase in lumber imports is only $500,000, lumber having hitherto been the largest article of consumption from the northern Republic. It is to North America, which now ranks as a close second in the list of foreign purveyors to Argentina, that English exporters must look as a competing country, it having overlapped France and Belgium and being close upon the heels of Germany.

Believing the information will be of interest to our manufacturers and exporters, I have prepared a list of articles which show either an increase or decrease in their importation into this country, during the three months covered by the Bulletin to which I refer. There has been an increased importation of the following goods:

Cotton-seed, linseed, and lubricating oils.
Kerosene.
Cotton yarns, cotton cloths (canvas, ducking, muslins, toweling, cotton blankets, etc.).
Hemp and jute bagging.
Cordage.
Binding twine.
Woolen goods of all kinds.
Cereal foods.
Oysters.
Salt fish.
Dried and preserved fruits.
Mineral waters.
Whisky in barrels.
Agricultural machinery of all kinds, excepting picks, shovels, and hand tools.
Seeds.
Windmills.
Boilers.
Galvanized and common iron piping.
Galvanized iron.
Stoves.
Tools.
Springs and axles.
Buggies and wagons.
Bicycles.
Steel girders and beams.
Hoop and hoop iron.
Sewing machines.
Motors.
Electric-light fixtures.
Street-railway material (electric equipment largely).
Watches and clocks.
Coal.
Yellow and spruce pine.
Glassware.
Leaf tobacco and sheep dips.

There has been, on the other hand, a decreased importation of the following articles during the same period:

Furniture of all kinds.
Pianos.
Trunks and boxes, and box material, "knocked down."
Paper pulp and paper of all kinds.
Blank books.
Bags of all kinds.
Boots and shoes.
All kinds of wire and nails.
Nuts and bolts.
Screws.
Steel rails.
Rod iron.
Pumps.
Iron chains.
Railway material.
Sheet and lead piping.
Kitchen ware and utensils.
Canned fish of all kinds.
Cigars of all kinds, excepting Habana.
Coffee (largely).
Beer and ale.
Hemp and jute "waste," and white pine.

The total value of Argentine imports and exports for the quarter given and that of those for the same quarter in 1898 may be seen from the following table:

Total value of Argentine imports:	
First quarter, 1899	$29, 821, 072
First quarter, 1898	26, 080, 196
Increase	3, 740, 876
Total value of Argentine exports:	
First quarter, 1899	47, 532, 893
First quarter, 1898	43, 970, 805
Increase	3, 562, 088

The increase in the value of exports has been wholly confined to wool, the price of which during the latter part of this season has been remarkably good for the finest qualities. Indeed, some fine wool sold here lately for a higher price than at any time during the past fifteen years. There has been a decrease in the value of exports of cereals, notwithstanding the quantity of wheat exported has been much greater than that exported during the like period in 1898.*

Owing to the importance of the subject to us, I am sure the following figures, covering the shipments of wool from this Republic during the present "season" (October 1, 1898, to May 1, 1899), as compared with those for the like period in 1897–98, will be of especial interest:

Wool exported from the Argentine Republic.†

To—	October 1, 1898, to May 1, 1899.	October 1, 1897, to May 1, 1898.
	Bales.	*Bales.*
Dunkirk	185,447	161,465
Antwerp	53,619	68,808
Hamburg	84,974	79,633
Bremen	28,954	35,067
Genoa	7,422	16,109
Great Britain	12,042	22,652
United States	6,262	10,995
Bordeaux	440	3,269
Havre	10,760	12,327
Marseilles	6,735	4,691
Barcelona	83	93
Total	396,738	415,109

* The export shipments of wheat for the first four months of 1898 amounted to 676,280 tons (metric), while those for the first four months of the present year have amounted to 1,007,551 tons. The shipments of corn and linseed have also been greater this year than last.

† It may be well to say that in many "barracas" hydraulic baling presses have recently replaced the old horsepower press. Bales are therefore this season heavier than they were last by possibly 20 per cent.

To appreciate the advantage this country has received from the advance in the price of wool, of which I spoke above, it is sufficient to say that, although, as will be noted from the figures just given, the quantity of bales exported during this season has not equaled that shipped during last season, their value exceeds that of last season by $4,572,430.

With regard to the decrease shown in the importation of the goods designated, it may not be out of place to say that I am of the belief, from a somewhat careful study of the subject, that certain lines of Argentine manufactures were materially benefited and have had a decided impetus given to them by the national exposition of Argentine products which was kept open here and very largely attended during the last three months of last year. That exhibit of what was being made in this country (to speak correctly, however, I should properly say in this city, Buenos Ayres) was a revelation to many, and without doubt did much to stimulate the then waning interest in the efforts put forth constantly by Argentine industries toward keeping the custom-house tariff on imported goods as high as possible.

The most interesting phase of the manufacturing question is, however, the effect the rapid rise in value of the paper money of the country has had upon the tariff.

Manufacturers and producers here are invariably found to be opposed to any plan proposed looking toward an increase in value of the paper money of the country. Such persons desire "high gold"—*i. e.*, cheap paper money. In the case of a manufacturer, "low gold," or appreciation in the purchasing power of paper, is equivalent to a reduction in the duty on imported goods, and his trade is injured, since, under such a condition, he finds it more difficult to compete with an imported article than he does when the gold rate is "high."

Indeed, the beneficial effect exerted upon importations by the marked increase that has taken place during the past two years in the value of the paper money of this country is not at once fully appreciated by an observer. I am quite certain, on this point, that the increased importation shown above in many lines would have been very much greater had this Government not maintained in force during this year the additional 10 per cent provisional custom-house tax imposed last September as a war measure. That extra 10 per cent has more or less offset the advantages importers would have derived from the increased value the paper money of the country has acquired during the past year. It is therefore unnecessary to say that manufacturers here will endeavor to have this additional 10 per cent tax maintained in force while gold remains "low."

To illustrate the practical operation on imported goods of the

rise in value of the paper money, and at the same time to show why Argentine manufacturers want cheap money, let me give an example:

An article costing in the United States $20 is imported; let us suppose the duty to be 40 per cent ad valorem, the freight $2, and the gold rate here to have been 3.30 when the article arrived, as it was about two years ago. The duty of 40 per cent would have been levied upon the cost of the article here—$22. Forty per cent of $22 (in gold) reduced to paper money at the rate of 3.30 would have made the duty on the article $29.04 in paper money. Now, reduce the cost of the article and the freight thereon to paper money at the same rate; then add to that amount ($72.60) the duty in paper money, and to the whole sum ($101.64) 25 per cent for the importer's expenses and profit ($25.41), and we find the article had to be sold for $127.08 paper money.

Now, take the same article and make precisely the same calculations, but upon a gold rate of 2.30 (that of to-day), and we find the same article paying the same freight and duty (in gold) could be sold to-day for $88.55 paper money, or 30 per cent less than in the other case, wholly and solely owing to the increased purchasing power the paper money of the country has obtained during the intervening two years. It may be well to state here that the circulating medium of this country is paper money; that all goods are so sold at retail; and that customs duties are paid in the same money at a rate daily fixed by the Minister of Hacienda.

It will be readily seen from the above that the "gold rate" is one of great importance to importers here and can markedly affect the importation of foreign merchandise into this country.

WILLIAM I. BUCHANAN,
Minister.

BUENOS AYRES, *May 6, 1899.*

UNITED STATES-BRAZILIAN TRADE.

The value of the annual trade of the United States with Brazil during the ten years ending December 31, 1898, has been as follows:

Year.	Imports from Brazil.	Exports to Brazil.
1889	$60,620,047	$10,848,271
1890	68,367,745	12,902,356
1891	100,041,601	15,064,346
1892	101,649,752	11,888,975
1893	78,622,193	13,480,320
1894	80,432,097	16,113,335
1895	79,316,217	14,104,763
1896	65,950,355	12,139,554
1897	65,928,850	13,767,505
1898	53,374,643	13,210,950

The fall in the price of coffee accounts for the decreased value of the imports from Brazil.

In regard to our exports to Brazil, which are our chief concern as a great producing and manufacturing nation in quest of enlarged foreign markets, it is to be regretted that our trade, according to our Treasury publications—from which I have quoted the foregoing table—shows but a very slight increase, if indeed any increase can be recorded.

These figures, however, are not borne out by the common opinion in Brazil, which is to the effect that trade with the United States has been increasing steadily of late years. As proof of this statement, the master of a steamship trading regularly between New York and Brazil cited the fact that his boat was loaded on that voyage from New York with cargo for Santos only, whereas formerly such a thing was unknown, the vessel being compelled, in order to make up a cargo for Brazil, to take freight for several ports.

As confirming Brazilian opinion, I embody statistics which appeared in the Brazilian Review on December 20 last, prepared by the editor, Mr. J. P. Wileman, well known as a writer on economic and financial subjects. This Government publishes no statistics, hence the difficulty in arriving at just conclusions.

REVIEW OF FOREIGN COMMERCE OF BRAZIL.*

Mr. Wileman estimates that imports during the last five years have grown steadily up to 1895, when they reached the maximum of £33,325,876 ($162,180,376) and then fell to £31,508,096 ($153,334,149) in 1896 and £25,774,885 ($125,433,478) in 1897, while for 1898 the value is expected to be about £23,000,000 ($111,929,300).

He says:

The relative value of coffee exports and of imported goods since 1894 is in round numbers as follows:

Year.	Coffee exports.		Imports.		Proportion of coffee.
					Per cent.
1894	£24,000,000	$116,788,000	£33,677,000	$163,889,121	71.3
1895	23,000,000	111,929,300	33,325,000	162,176,812	69
1896	19,000,000	92,463,500	31,508,000	153,333,682	60.3
1897	19,000,000	92,463,500	25,775,000	125,433,478	73.7
1898	14,000,000	68,131,000	23,000,000	111,929,300	60.9

As is shown by the above table, the normal percentages of the value of coffee to imports appear to be about 70 per cent—that is, that coffee alone should be sufficient to pay at least 70 per cent of imports. In 1895, the proportion remained about

*The values throughout this review have been reduced to United States currency in the Bureau of Foreign Commerce.

the same; in 1896, in consequence of falling prices of coffee and insufficient reduction of imports, the proportion fell to only 60 per cent; in 1897, in spite of much lower prices, the greater quantity maintained the value of coffee about the same as in 1896, while imports fell heavily, in consequence of which the percentage rose to 73.7 per cent; while in 1898, if our anticipations be correct, the value of coffee will represent not more than 60.9 per cent of imports, and is therefore considerably below the normal rate of 70 per cent. In other words, we are still importing much more than we can afford and living, in fact, on credit or on the surplus that the funding operation has afforded.

As the value of coffee falls, that of imports must decline, unless there is some compensation of another kind. Certainly, the suspension of the service of the foreign debt is such a compensation, and has in a way interrupted the natural process of balancing our obligations and assets; but the fact remains evident and indisputable that even with the large reduction imports have already undergone, they are still in excess of the true purchasing power of the country.

Exports to Brazil have fallen off since 1893 from every one of the principal countries, with the single exception of the United States. The reduction is as follows: Great Britain, 18.5 per cent; France, 28.6 per cent; Hamburg, 21.2 per cent; Belgium, 53.5 per cent; Argentine Republic, 11.1 per cent; Uruguay, 17.8 per cent; and Portugal, 16.7 per cent. The only increase was that of 13.4 per cent for the United States. The greatest reduction was in exports from Belgium, of 53 per cent.

That the falling off is not due solely to high tariffs is proved by the fact that, in spite of the reduction of the tariff, the value of imports continues to decline. Naturally, it must adjust itself to the purchasing power of the country. If our principal medium of exchange—coffee—has within a few years experienced a fall of 40 per cent in value, how is it possible to expect that the value of imports can continue unaltered?

For the year 1897, the total value of all the merchandise imported by the eight leading countries given above from Brazil amounted to 53,638,544 milreis gold ($29,286,645) exclusive of coffee and rubber, the real c. i. f. value of which, for which the country is creditor, being 44,434,542 milreis gold ($24,261, 260), equivalent to £4,998,885, or, say, in round numbers £5,000,000—not a very extravagant valuation when it is considered that it includes the value of all exports of cocoa, hides, and saladero produce, herba matte (which almost reaches a million), tobacco, sugar, minerals, etc.

The years 1897 and 1898 show the following results:

Articles.	1897.		1898.	
Coffee exported	£18,500,000	$90,030,250	£14,000,000	$68,131,000
Rubber exported	7,600,000	36,985,400	8,000,000	38,932,000
Other products	5,000,000	24,332,500	5,000,000	24,332,500

Summing up, we now perceive that the value of imports and exports for 1897 was:

Description.	Value.	
Imports	£25,774,885	$125,433,478
Exports	31,100,000	151,348,150
Balance in favor of our trade	5,325,115	25,914,672

For 1898 we estimate:

Description.	Value.	
Imports	*£22,000,000	$107,063,000
Exports	27,000,000	131,395,500
Balance available	5,000,000	24,332,500

*Given at £23,000,000 on page 27.

There seems, therefore, no question whatever that the balance of trade is really in our favor, even now when the gold value of our principal export has undergone so large a reduction of value.

FRANK D. HILL,

SANTOS, *April 18, 1899.* *Consul.*

RESOURCES AND TRADE OPPORTUNITIES OF THE AMAZON VALLEY.

Of all the South American republics, I consider Brazil the most important commercially to the United States; and in all Brazil the city of Para, by reason of its geographical position and the natural wealth of the surrounding country, seems to me to afford the greatest advantages to our manufacturers and merchants. The merchants here are inclined to do business with the United States in preference to Europe, and we could soon control the field if, as I have frequently pointed out in previous reports, we looked after this trade as Europeans do—sending capable men to canvass the field and study the needs of the people.

It is difficult to obtain official statistics in this country. My previous reports have been based upon personal investigation, and it is pleasing to see that American manufacturers are taking an interest in them, as is shown from the letters of inquiry which I have received from all parts of the United States. Inquiries have even come from England, France, Japan, and China.

The trade of Para and of all Brazil is done on long terms of credit, in many instances as much as six months being given. It is difficult to ascertain with any degree of accuracy a merchant's commercial standing, in the absence of anything like Dun's or Bradstreet's agencies. This is due, in great measure, to insufficient means of communication between the ports and the interior, and the fact that people engaged in the production of natural wealth, which is often not marketable except after delays which can not be calculated in advance, want easy terms of payment. Another reason for long credits is the strong competition from Brazilian manufacturers in the south. There are few factories in the north; but São Paulo,

Rio de Janeiro, and other southern cities of Brazil send shoes, dry goods, hosiery, notions, liquors, patent medicines, and many other goods to this market. It is not difficult to compete with these Brazilian goods, because of their inferior quality; but, considering the little or no duties they have to pay and their facilities for giving long credit, they offer a strong competition. Another advantage is that these southern factories provide their agents here with stock to be sold on the spot. I hear that it is much easier to market Brazilian goods which are ready for delivery than the products of other countries.

While the United States is the largest consumer of Brazil's raw material, Brazilian imports of American manufactured goods, even as compared with those from small European countries, are small. Yet the Brazilians, certainly those of the Amazon region, are anxious to trade with us. Goods are coming here from Germany and France, such as bicycles, which are dearer than and much inferior in quality to those made in the United States, but the manufacturers of the former countries have their agents here to show the goods and push their sales.

Openings for new industries in this region are most promising, and the chances are excellent for obtaining State government concessions. Brazilians lack initiative, and almost everything is done with foreign capital. England has not only controlled nearly all the import trade, but is also alive to the opportunities for the employment of capital, and syndicates are being formed almost every week. Now, however, Belgium is sending capital and buying up property in Para, such as the electric-light plant. Negotiations are in progress for building the new waterworks, cattle pen, electric railway, and conducting other important enterprises. All awards will be made some time in July, and will go to the lowest bidder. France and Germany have also come into the field, and if American manufacturers expect to keep pace with their competitors they must be active.

The strong current of immigration, which thus far has been supplied principally by Portugal, is now coming from Spain and Italy, especially the latter, and it is said that hereafter Portugal will contribute a small proportion as compared with the other two countries. It is claimed, however, that Italy and Spain supply only unskilled labor, a class not desired in the rubber fields. Why this should be so I can not say; nevertheless it is said to be a fact.

THE AMAZON REGION.

I was on the U. S. S. *Wilmington* on her recent trip up the Amazon. The natural wealth of this region is enormous, almost beyond estimation. Overburdened cocoanut trees increase in quantity as

you ascend the river. The thick forests of rich woods, the powerful streams—each one a mighty river—appearing at every turn of the ship, and the endless rows of rubber trees along the banks speak volumes for the commercial and industrial future of Brazil.

I have learned that some accounts which have been written concerning rubber, although not entirely misleading, have not been quite accurate. The impression created by the narratives of previous travelers who have been up the Amazon is that the rubber production is on a constant and endless increase. It is not generally believed, but it is nevertheless a fact, that the output is not likely to increase to any marked degree unless a much larger force of rubber gatherers is sent into the forests than has been employed during the past year or two. This is the opinion of the best informed rubber-plantation owners. Reports that the supply of rubber trees is inexhaustible are largely overdrawn. It is true that there is no fear of immediate scarcity of rubber, and perhaps there will not be for the next fifty years. It is believed in well-informed circles that hereafter there will be a gradual but steady shrinkage in the rubber product unless the present force of rubber gatherers is largely increased, because, in the first place, the trees conveniently located near the banks of the rivers are naturally the first to be worked, and in consequence are becoming exhausted from constant tapping, the milk extracted being weaker each year; hence the shrinkage in such rubber is very great. In the second place, the rivers have all been worked inland for a distance of about 3 miles from their banks, and, in order to reach the so-called unexplored rubber forests still farther inland, it will require much more time and necessitate three times as strong a force. Owners of rubber farms inform me that milk drawn from rubber trees five years ago possessed twice the strength contained in that extracted from the same tree to-day. The islands near Para are all overworked. Good judges can easily recognize rubber drawn from overworked trees by its peculiar color.

On the banks of the famous Purus River are the most magnificent rubber forests I have ever seen. They form a part of a vast belt which has scarcely been touched. Along the Purus and Jurua rivers and their affluents grow a greater number of the trees than in all the other regions of the country combined. The extent of these forests is so far beyond estimate that it is impossible to obtain even an approximate idea of the area of this rubber belt.

The Purus River is one of the most important tributaries of the Amazon on its southern side. It rises within the confines of Peru, passes through a small portion of Bolivia, continues in a northeasterly direction through Brazil, and, after draining several plains, joins

the Amazon. It is said that its channel is about 2,100 miles in length. The only settlers I saw were located near the mouth of the river.

The River Madeira is the chief tributary of the Amazon on the south. Not many years ago, the outer world was supplied with rubber taken principally from the trees of this region, though it produces the smallest proportion of high-grade rubber. A boom, however, may be started here soon, as I hear that a scheme is on foot to build a railroad around the falls, some distance up stream, thus opening up communication with the upper river. Reports say that the surveys are almost completed, and that several miles of the road are under way. A Belgian syndicate is said to have charge of this enterprise, the same one which is interested in the Para electric-light plant, the proposed waterworks, and the harbor improvements here.

The Jurua River, another southern tributary of the Amazon, rises in Peru and crosses a portion of the State of Amazonas. It is said to be about 1,200 miles long, navigable by steamboats for 600 miles. This river is very crooked, and the channel frequently changes. In every direction it is bordered by endless forests. The rubber fields of this district equal those of the Purus. You also see in some places a promising undergrowth of young rubber trees, which is likewise observed on the Madeira.

Great quantities of precious woods are seen everywhere beyond Manaos, and it is said that up the Madeira there are large tracts of mahogany, walnut, cedar, cherry, ebony, and many other valuable trees.

The River Negro, which empties into the Amazon at Manaos, is also a large stream. The water discharged from this river is black, hence its name. The channel is very deep opposite Manaos—more than 70 fathoms in many places. Large quantities of Brazilian nuts are raised up this stream and brought down to the market; cocoa trees are also plentiful some distance up the river. Very little rubber, however, is produced here.

The Amazon River above Manaos is called the Solimoes as far up as Iquitos, when it assumes the name of Maranon, which it retains to its source. The Madeira and other rivers below Manaos, which city is 1,000 miles up the Amazon from Para, are beginning to be settled; but when the Upper Amazon is reached, some distance above Manaos, many miles can be traveled without seeing a single hut. It was quite a treat after many hours of contemplation of those powerful but deserted streams and thick and lonesome woods to suddenly discover a yacht with a few people on board appearing from some of the affluents. One is impressed not only with the

magnificent rubber trees of the country, but also with the enormous cocoa fields that are seen far beyond Manaos and the wonderfully thick forests of rich woods. I noted high tracts of land above Manaos, suitable for cattle raising. In view of the extraordinary scarcity of meat at Para and surrounding country, the opening is good. Occasionally I saw a good-sized cattle ranch, especially as we drew near Iquitos. I consider the cattle industry in these regions equally as profitable as the quest for rubber, and much more healthful. Horses, sheep, hogs, cattle, and, in fact, every variety of animal was seen on our voyage. I mention this in order that it may be shown beyond doubt that such animals can be raised here; and, more important still, a ready market can be found for all the cattle and sheep that can be brought to this market, and one can get his own price. I can not say too much upon this subject, as it seems such an exceptionally rare opportunity. I know too well how often Para is entirely out of meat, and also the serious difficulty encountered by those who are attempting to bring cattle here from Buenos Ayres. It is said that out of 500 shipped here a few days since, nearly half was lost; this has occurred not only once, but many times. Texas is nearer than Buenos Ayres, and it should pay to send cattle from Galveston. It seems almost incredible that the scarcity of meat in the markets of Manaos and Para has not attracted the attention of our exporters.

Gold is found at the limit of navigation of the Alto Maranon. The exploration of this region is rather difficult, because the Maranon above Turimaguas is not inhabited, except by tribes of savage Indians who are said to endanger the lives of the explorers unless they are armed to the teeth. The climate differs much from that of the lower Amazon and is considered healthy. There are nearly 4,000,000 square miles of rich ground which could be devoted to the cultivation of almost any product, and markets for the large variety of products of this region are not lacking, it being unnecessary to go any farther than northern Brazil.

Over 3,000 miles up the Amazon, at the foot of the Andes in Peru, is situated the beautiful city of Iquitos. This is not as large as Para, but its position at the foot of the Andes and the wealth of the surrounding country promise for it a great future. There will soon be many rare opportunities here for the employment of capital, as concessions will be given out for sewerage service, waterworks, slaughterhouses, market house, city electric railway, and improvement of the harbor. The Booth Steamship Company, Limited, and the Red Cross Line are already exploring the field. They have recently established a regular line of steamships, sending vessels which are plying between New York and Para up the Amazon to Iquitos.

Our manufacturers, merchants, and capitalists have an immense field in this and the surrounding country, and, judging from the robust looks of the natives, the climate would seem perfectly healthful. The city is quite elevated. The river at this point is almost if not quite as wide as it appears at its mouth.

As you ascend the stream, the more numerous are the thick, heavy forests and stately trees. The black, matted, and warped undergrowth gives the impression of a most lonesome wilderness.

The sight of these wild woods, I am told, not infrequently produces a terrible effect upon newcomers. Many fortune hunters have visited these regions, settled down, and established themselves; then, later on, attacked by one of those fits of despondency which it seems impossible to overcome, they pull up stakes, abandon all interests and ambitions to become rich, and leave the country.

NEW ENTERPRISES.

R. Santos, of Santos & Co., New York, has applied to the proper officials of the State of Para for a guaranty of 7 per cent interest on a capital of £200,000 ($973,300) to establish a new line of steamers to carry frozen meat from New York to Para. The case will come up for consideration during the coming week.

The governor of the State of Para asks me to inform my Government of the fact that the State congress of Para passed a bill a few days since appropriating $50,000, to which amount the authorities at Rio de Janeiro have signified their intention to add $200,000, as a subsidy to a reliable company which will establish a new line of steamships to ply between New York, Para, and Rio de Janeiro. The governor manifests deep interest in this new undertaking and expresses the hope that Americans will not overlook this opportunity.

The splendid electric railway established at Manaos, of which Dr. Hebblethwaite is manager and Mr. Charles R. Flint principal stockholder, is now being operated. It is 15 miles in length, thoroughly equipped with all modern improvements, and is certain to prove a paying enterprise.

K. K. KENNEDAY,
Consul.

PARA, *May 25, 1899.*

MACHINE TRADE IN ECUADOR.*

There is not a large machine trade in this country. Mr. Mann, a Scotchman, has machine works in Guayaquil; there are also a few factories, sugar refineries, and other establishments using steam appliances in this city and province, and, I am informed, the Ecuador Development Company (33 Wall street, New York) is contracting for locomotives, etc., for the Guayaquil and Quito Railway.

Supplies are ordered direct, as well as through jobbers, and mostly from the United States.

There are some exceptionally good houses here in the importing business. W. R. Grace & Co., Flint, Eddy & Co., and other firms have agencies in this city.

No stock of machinery or machinery supplies worth mentioning is carried; orders are made from catalogues according to purchaser's ideas and preferences of importer, who generally selects for these orders the firm with which he is accustomed to deal. I think the local importer is the influential factor in the trade, and connection with him offers the best chance for obtaining business. At the same time, it would be well to be in touch with New York exporters.

Six months' credit is sometimes granted, but cash seems to be the rule for this class of goods. Importers generally require cash or first-class security from their customers.

A Buffalo firm keeps a representative constantly traveling in South America. He is, of course, a mechanic as well as a business man, competent to advise about purchases as well as repairs, and supervise same when necessary. In this manner, a large business is secured for this firm.

The salesman should not compete with local importers and seek orders direct, but should turn over all business to the firm with which he establishes connections. He should be of good address, able to speak Spanish fluently, and able to give advice on all points—credits, packing, advertising matter, etc.

In case the business of one firm does not justify the employment of a first-class commercial traveler, it should combine with one or more houses dealing in specialties, and secure a good salesman to represent all. This plan is successfully pursued by English and German houses. The best method, in case it does not suit to send a salesman, is to appoint reliable local agents, who might be authorized to advertise in the papers of the country if they deemed it advisable.

*This report was made in answer to inquiries by a Massachusetts firm, to which Advance Sheets have been sent.

Mr. Edward Pavia, the general agent of Messrs. Flint, Eddy & Co., is a reliable and progressive man. Correspondence with him might result in mutual benefit. Local agents, however, are as a rule but a poor reliance, unless stimulated to effort by traveling salesmen.

The imports of steam machinery and appliances from the United States in the year 1898 amounted to about $40,000 gold, according to the declared values in the custom-house. About $20,000 more came from Europe. This is a small amount; but Ecuador is only one of the Spanish-American countries, and a systematic effort to obtain business may be worth while. If the proposed railway to Quito* is constructed within the next few years, as expected, there will be a large increase of machinery and other imports into this country.

The two things necessary to increase our trade with this coast are competent traveling salesmen and reasonable freight rates. The Panama Railroad Line charges 47½ cents per cubic foot; Grace & Co. and Flint, Eddy & Co. charge 25 to 30 cents via Straits; European lines via Straits, 15 to 20 cents.

An isthmian canal is a vital necessity; only when it is constructed will we have the business we should on this coast.

PERRY M. DE LEON,
Consul-General.

GUAYAQUIL, *June 14, 1899.*

RESOURCES OF ECUADOR.

Consul-General De Leon writes as follows, under date of Guayaquil, May 2, 1899, to a Kansas correspondent:†

The inter-Andine plateau is but a portion of the country opened up by the projected railway to Quito; the section which is especially adapted to tropical products (cane, coffee, and cotton) is on the western slope of the mountains within 100 miles of this city. The plateau is at a greater distance. The temperature of the inter-Andine region varies according to the locality. In 1896, if I remember correctly, all but twenty-eight days of the year were at least partially cloudy; rain fell about one hundred and seventy days, and the temperature averaged 45°. The dry season is marked in the months of July and August.

Seismic phenomena are not infrequent, and structures are erected with a view to this emergency; yet the destructiveness of volcanic eruptions and earthquakes has always been restricted to abandoned districts. It can not be said, however, that there is absolutely no danger.

* See CONSULAR REPORTS No. 222 (March, 1899), p. 364.
† To whom Advance Sheets have been forwarded.

I can not make a positive statement as to the values at which properties are now being transferred. Near Quito, land is said to be held at $100 an acre. On the other hand, there are vast tracts which will enjoy full advantages of railway, and can be purchased at a very reasonable figure. It would be well to make personal investigation before purchasing.

The field for American enterprise, capital, and modern machinery in Ecuador, once transportion facilities are provided, could not possibly be better. The foothills of the Andes are especially adapted to sheep raising on a large scale. In the warmer districts of the inter-Andine Valley cotton grows wild, and coffee is of the finest grade. Sugar cane will thrive on the lands now covered by forest at the base of the Andes. The supply of water power is abundant in every part of the inter-Andine plateau. Timber is scarce, and but little is used in construction. Of course, the railway will place the interior in easy communication with the vast forests of the Pacific slope. The fuel supply has also been deficient, although rich veins of coal and petroleum wells are reported in that undeveloped section.

The Spanish language is spoken by the people generally; the Indians have an aboriginal tongue. A few of the better class of the natives speak English and French.

HOW TO EXTEND OUR TRADE IN SOUTH AMERICA.

Consul Hill sends from Santos, under date of April 18, 1899, tables showing the trade of the United States with the various South American countries during the last ten years.* There has been during the decade, comments Mr. Hill, a steady decline in our imports from South America in values and quantities; for, with the single exception of coffee, the staples constituting our imports from that section (india rubber, wool, sugar, hides, etc.) are higher in price to-day than they were ten years ago. Coffee, which has greatly increased in quantity, has fallen tremendously in value. Rio Standard No. 7 sold July 1, 1893, at 16½ cents; December 1, 1894, at 15⅞ cents; January 5, 1895, at 16 cents; January 4, 1896, at 14⅜ cents; January 2, 1897, at 10¼ cents; December 4, 1897, at 6⅜ cents; the last-named figure being about the prevailing price at New York at the present time.

The most notable expansion in our export trade during the last ten years, adds the consul, has been with Europe; but there has

*See Review of the World's Commerce, 1898, pp. 24-28.

been a greater increase with every part of the world than with South America. He continues:

The United States should employ the agencies adopted by European nations in attaining their supremacy in these markets, viz, steamships under our own flag, banks under our own control, and business houses under distinctively American management. Once we are placed upon terms of equality in these particulars, our merchants can be left to their own initiative. No one acquainted with their resourceful, enterprising, and adaptable character need doubt that, with our present capacity to manufacture largely and cheaply, we shall gradually assume our proper place as a competitor in South American trade.

Consul Hill mentions the good effects of the cruise of the *Wilmington* to the upper reaches of the Amazon. He says:

In addition to the labor of exploration that formed such an important object of the cruise, the display of a modern steel vessel so perfectly adapted to river work as the *Wilmington* is a fit exhibition of the capability and preparedness of our domestic designers, steel plants, shipyards, and ordnance works to turn out products equal to the best. Nothing that comes within the actual purview of foreign folk, whether native or merely domiciled denizens, is so emblematic of a nation's industrial power or weakness as the government vessels that fly its flag in foreign parts.

During the years succeeding Admiral Walker's visit of congratulation to Brazil in 1890, he continues, when the vessels of our new navy took the place upon this coast of the *Tallapoosa*, *Essex*, and *Yantic* types—which were neither ornamental nor useful and were in constant danger of being run down by nonmilitant coal barges—the increased respect commanded by the appearance of our vessels has been, I believe, a real and constant, though inappreciable, commercial factor.

EMIGRATION TO SOUTH AMERICA.

The following, dated Montevideo, April 11, 1899, has been received from Consul Swalm:

This consulate has been in receipt of several communications from those who contemplate becoming colonists in the River Plata countries, all asking particulars and opinions as to the enterprise. I have advised them to remain in the United States.

Apropos of this subject, Mr. Warren Lowe, the able editor of the Buenos Ayres Herald, on April 8, published the following article on American and English emigration to Argentina. What he says about the subject applies with equal force and truth to the whole

River Plata country, and I advise that it be given place in the CONSULAR REPORTS for the information of all whom it may concern.

We very frequently receive letters from people who apply to us for information about this country, inquiring as to the advisability of coming here to settle. An attempt to answer all these letters would almost necessitate the employment of a secretary, not to speak of the labor involved in getting all the information desired. We think it appropriate to make a few general observations touching the main points of interest, which may serve to some extent as an answer to all these numerous inquiries.

Those of the English-speaking race who think of leaving their native land for these shores should note the condition of other people who have gone to a country where the language is different from their native tongue, and then reflect that they would be situated here pretty much as a Spaniard, for instance, who landed on American or British soil and was ignorant of English. They should bear in mind that the language of this country is Spanish; that the people are in a great measure of the Spanish race, and have its customs and characteristics; that while there is complete religious liberty, the Catholic church is that of the State. They should also reflect that the social observances of the country are very different from those of the English-speaking races. Coming to particulars, it may be stated that no mechanic who is not an expert or a specialist in certain occupations should come here hoping to better his condition, for the very simple reason that the country is already overrun by workmen from southern Europe, who are content to work for lower wages than any British or American mechanic would care to accept. Italy can easily outbid America or Britain in most departments of labor; and, as a matter of fact, the operatives and manufacturers here are either Italians or Frenchmen, principally the former. This remark applies to all varieties of mechanical labor, with the exception of specialties, such as electrical engineering; but in this field there is already a congestion in this Republic. We would strongly advise English and American mechanics not to think of coming here to improve their condition. The same advice applies to manufacturers of all sorts. Not only is there a full supply, but the market is overstocked with products of native manufacture, for the most part of a very inferior kind.

With regard to agriculture, our discouraging advice would be emphasized. The farmer here is the Italian or the Basque, who can live in a manner to which English-speaking people are not accustomed, and will work for wages which these would consider sufficient only to escape starvation. At the moment we write there are hundreds of men now seeking employment who would be glad to work for $2 a day of the money of this country (which is equal to about 90 cents American currency) and board themselves; and this in face of the fact that the cost of living is greater here than in New York or London. Those who have capital to lend on mortgage or who can invest in real estate can safely get twice as much interest or income as in England or America. Those who have a small capital, say of $5,000 or $10,000, and are ready to go to the frontier to live a rough life for years, where they will never hear their native tongue, where they will certainly suffer from homesickness, where the conditions of life to English people are nearly unbearable—such persons in the course of time will come out with more dollars, if they come out at all, than they would amass at home. The climate in this country is magnificent; no place in the world can surpass it in that respect. It is essentially a white man's climate. Stock graze in the open all winter, even in the coldest localities. The country has a great future, but no man in his senses would take the responsibility of advising English people to immigrate or to come except with capital, as we have already stated. True, many have come individually and have done well, but every attempt to establish a colony of English-speaking people has proved a miserable failure.

HEATING AND COOKING STOVES IN URUGUAY.

Impelled by the frequency of inquiries touching the prospects for an increase in our trade in heating and cooking stoves with this Republic, I have made a careful examination, and submit the following report for the information of manufacturers in this line:

Heating stoves.—It is very safe to say that 95 per cent of the houses in Uruguay have no heating arrangements whatever specially designed for the purpose. It is claimed by many of the inhabitants that heat is at no time required in the houses; that heat in the house is not healthy, but conduces to maladies of throat and lungs. Yet, during the winter season, from April to October, the dampness in the houses is far more unpleasant than crisp and snappy cold. With the frequent and heavy rains, the walls become very damp, and clothing or books must not touch them or a mold will form. Such a condition has for one of its results an enlarged percentage of pulmonary troubles, and a death rate out of all proportion to the general salubrity of the climate. There are no chimneys for either fireplaces or stoves. A $14,000 residence, built this season, has for its only chimney a stovepipe let through the kitchen roof for the cook stove.

The American style of heating stove is about the only one seen in the market; the smaller and simpler forms being used. They are popular with those who have their homes reasonably heated; but the demand is small, and only one house in Montevideo keeps a stock. The American oil stove has found a good market here, and the sole competitor is one of Belgian make, with first-class blue-flame combustion. The Belgian stove sells at about one-half the price asked for the American, on account of the fact that the United States article is usually a combination of lamp and stove, and so comes under a different and higher customs classification.

Cooking stoves.—The native cooking stove is a very substantial affair of heavy wrought iron, made in local factories from imported plates. The stoves are good cookers and roasters, but do not bake so well. They are made with or without water reservoirs, and are very durable—something like the wrought-iron range. About 50 per cent more fuel is used by these than by American stoves of the same capacity. They cost from $20 to $70, according to style of finish and completeness of the water outfit.

Cook stoves have been imported for some years from the United States, and are gradually winning their way, especially in the European households. The fact that they save fuel tells in their favor, as coal costs from $10 to $14 per ton. The coal is all imported from

Wales or the United States. Wood is even higher in price than coal, considering results.

The duty is a serious drawback to trade in this line. It amounts to 8 cents per kilogram (2.2046 pounds), including the package. As the stoves must be well packed, the additional weight adds heavily to the cost, and a heating stove that could be bought at from $7 to $8 retail in any city in the United States must sell here for at least three times that amount, and then leave only a fair margin for profit to the dealer. The United States cook stove sells at about the same rate as the one made in Uruguay, but the wrought-iron article, with its power to withstand hard usage, has been so widely employed that only when the better methods, greater economy, and generally superior character of the United States stove become known will our manufactures win the market to any extent.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *May 10, 1899.*

PORT WORKS AT MONTEVIDEO.

Minister Finch writes from Montevideo, May 12, 1899, in regard to the proposed harbor improvements* at that place. The Minister of Public Works, it appears, has matured a scheme for providing the necessary funds to pay the cost of construction and has approved plans and specifications on which intending bidders shall base proposals. The Congress of Uruguay has these plans under consideration, and as soon as adopted copies will be sent to the Department. The expenditure involved will be not less than $15,000,000, and possibly as much as $20,000,000. The vice-consul at Montevideo, Mr. Howard, urges that a representative of some United States firm be sent at once, equipped with documents bearing official indorsement, to satisfy President Cuestas and his ministers of the financial ability and the skill and capacity of the parties whom he represents to carry out the work in accordance with the plans and specifications. French and English representatives, says Mr. Howard, will be in the city provided with the necessary indorsements. They have already given notice that the money is available, and promise that the work shall be prosecuted and completed under the direction of the most skillful engineers. Minister Finch says that an American sent to Montevideo on this mission, with suitable indorsements, will be shown every courtesy. The contract will yield a substantial profit, and Americans should make every effort to secure it.

*See *post*, p. 176; also CONSULAR REPORTS No. 217 (October, 1898), p. 239, and No. 226 (July, 1899), p. 583.

HARBOR REGULATIONS OF PUERTO CABELLO.

Vice-Consul Volkmar sends from Puerto Cabello, under date of June 15, 1899, copy of the new harbor regulations of that port. The regulations read:

GOVERNMENT REGULATIONS FOR THE HARBOR AND WHARVES OF PUERTO CABELLO.

ARTICLE 1. All vessels coming from foreign ports are required to wait in the bay for the doctor's visit, after which they may or not enter, as the captain of the port may decide in accordance with the law.

ART. 2. It is forbidden, under fines and penalty which shall be established, to all craft to go near or alongside of vessels which anchor in the port previous to the doctor's visit.

ART. 3. Any vessel which anchors in the bay of this port is considered as having entered, and is consequently bound to receive the visits of the doctor and of the custom-house officials, without which she can not land passengers or anything whatever.

ART. 4. Vessels which, by order of the sanitary board, are to remain under observation shall hoist at their fore-topmasts a yellow flag; and this will be the signal for all craft to keep aloof from them and not to go near without previous permission of the captain of the port.

ART. 5. No vessel having on board powder, dynamite, or other explosive substances of like nature shall enter the harbor until after the competent authorities have taken the necessary measures of security for the landing of said cargo without danger.

ART. 6. After the visits of the doctor and of the custom-house officials, and on the vessel being admitted to "pratique," the captain of the port shall point out the place where she is to land her cargo.

ART. 7. Steamships or sailing vessels which are loading or unloading must withdraw from the wharves daily at 6 p. m. and stay until 6 a. m. at a distance of at least 6 meters from them. Only by express permission of the captain of the port shall this order be dispensed with.

ART. 8. After the vessel has landed her cargo, she shall remove from the wharves and cast her anchors at the place which shall be designated to her for the purpose by the captain of the port.

ART. 9. All vessels anchored in the port are required to have sufficient moorings for their own security and for the safety of their neighbors.

ART. 10. It is forbidden to stretch ropes from one vessel to another in the port; but when the steamers are obliged to so stretch them, they shall take care to keep always by day and by night a sailor on guard to lower them when necessary; and they shall be held responsible for any damage accruing from the nonfulfillment of this rule.

ART. 11. All vessels in port must have during the night a globular light at their fore-topmasts at a height of 6 meters from the level of the gunwale.

ART. 12. It is not allowed to any vessel to throw overboard in the port sweepings or rubbish. In order to perform any of these operations, a permission is necessary from the captain of the port, showing how and where it should be done.

ART. 13. The captains are required to keep order on board of their vessels; and they shall prevent any disturbance, scandal, or quarrel which may arise; and, should

their authority not be sufficient, they may ask for help from the office of the captain of the port.

ART. 14. Captains of vessels in port are obliged to give each other all possible assistance in case of any serious accident of whatever nature.

ART. 15. No vessel once anchored is allowed to change her anchor ground without previously asking for and obtaining permission from the captain of the port, who shall grant it when there is a just cause.

ART. 16. No captain is allowed to overhaul his vessel inside the harbor without permission from the captain of the port, who shall point out the place where this operation is to be performed.

ART. 17. It is absolutely forbidden to boil pitch, tar, or rosin on board of vessels lying in port. The captain of the port may give permission for such operations when needful, and designate in each case the place where they should be performed.

ART. 18. Sailors on guard shall notify their chiefs immediately if they notice any removal of anchors or buoy ropes or robbery of goods or other effects on the wharves or on board of any vessel.

ART. 19. It is not allowed to take ballast without permission of the captain of the port and previous to taking the precautions determined by law for such cases, so as not to obstruct the anchorage.

ART. 20. Vessels which carry on board a fire engine must keep it in perfect condition and ready for use in case of need.

ART. 21. No guns nor other arms shall be fired in the port without express permission of the captain of the port.

ART. 22. Captains of vessels lying in the port are required to hoist their respective flags on Sundays and on all other holidays prescribed by the law.

ART. 23. No vessel can leave the port after 6 p. m. without permission of the competent authorities.

ART. 24. The entrance into the port must always be free to the vessels which enter and leave; consequently, it is strictly forbidden to anchor in a place which obstructs the traffic.

ART. 25. Should a vessel, on leaving the port, cause any damage to another one, she is obliged to immediately drop her anchor and await the result of the summary investigation which shall be made as to the culpability of the case, in accordance with the maritime laws; and should she continue her voyage before the judgment of the captain of the port, in the terms prescribed, she will be held culpable, guilty and confessed, and absolutely responsible for the damage done. But should the investigation be protracted on account of the circumstances of the case, she may leave the place, giving bail satisfactory to the captain of the port to answer for all damages and fines.

ART. 26. For loading and discharging, the following order shall be observed: The vessel which enters port first (without exception of flag) shall discharge first, and the others successively in order of entry; and for loading, the one which finishes unloading first shall be the first to commence, and the same order shall be continued, provided, however, that the wharves are not occupied by vessels unloading, as this last operation has the preference.

Steamers shall have preference over sailing vessels in both cases, and postal steamers over all others.

ART. 27. A vessel which enters in a damaged condition and requires to be unloaded at once shall be attended to with due regard to the urgency of the case.

ART. 28. Vessels anchored in the bay which need to send a boat on shore or vice versa after 6 p. m. shall provide such craft with a light.

ART. 29. Owners and consignees of goods can not leave on the wharves mer-

chandise of any kind without previous permission of the collector of the custom-house and captain of the port, with exception of mineral coal, which may remain on the place designated for that purpose.

ART. 30. No captain shall admit on board of his vessel sailors enlisted in the service of other vessels and who have received their pay in advance.

ART. 31. Captains of foreign vessels are not allowed to discharge men of their crew except for justified reason and always subject to the consent of the captain of the port.

ART. 32. The difficulties which may arise on board of the vessels lying in this port from collection of wages, illtreatment, or other causes, shall be adjusted before the captain of the port, to whom the interested party shall apply at any hour day or night, according to the gravity of the case.

ART. 33. All officials of the wharves, revenue officers, or inspectors in the service of the National Government shall strictly enforce the orders of the captain of the port as expressed in these regulations.

ART. 34. The failure to comply with any of the instructions to which this regulation alludes, and which does not call for any other proceeding, shall render offenders liable to fines of from 100 to 200 bolivars or to arrest and imprisonment in the public jail in accordance with the law, according to the judgment of the captain of the port.

ART. 35. The fines alluded to in the preceding article shall be paid to the treasury of the custom-house by order of the collector of said office.

ART. 36. Captains, owners, or consignees of national and foreign vessels which anchor in this port, as also masters of canoes, lighters, boats, and craft of all descriptions, are obliged to provide themselves with a printed copy of these regulations, so that they may not allege ignorance of the duties imposed upon them. The cost of the regulations shall be 2 bolivars each copy, which shall be applied to the printing of same.

ART. 37. Against all the decisions of the captain of the port which refer to the fines mentioned in article 34 of these regulations, an appeal can be made to the Ministry of War and Marine.

ART. 38. The harbor regulations enacted by this office under date of March 31, 1875, are hereby annulled, and the present ones shall enter into force from the date of proclamation.

NOTE.—Special attention of the captains of vessels which enter into this port is called to the three buoys placed to protect the submarine cable existing between this port and that of La Guayra; they are placed in a parallel line with the coast to the south, at an approximate distance of 400 meters from the point called "La Garita," in the direction towards the Island of Goaiguaza. These buoys are painted red and are of ellipsoid form, crowned by a visible point, formed with the letters C. F.

IMPORTS OF PARAGUAY.

I give below a list of the chief imports of this country in 1898. These articles are the only ones worth the attention of our exporters, as the others are imported in quantities too insignificant to justify inquiry.

The 1898 report not being published, the following list of imports was copied by me from the custom-house books.

Summary of importations for 1898.

Articles.	Value.*	Articles.	Value.*
Eatables and other articles	$398,192.59	Perfumery, toilet articles, etc.	$21,479.95
Drinks	237,738.38	Mercery	67,019.08
Hardware, naval, and machine articles	163,823.66	Textiles	709,012.74
Lamps and kitchen articles	2,433.10	Ready-made goods, etc.	24,989.25
China, glass, and crystal wares	15,043.05	Hats, etc.	44,401.50
Skins and leather, manufactured	11,961.14	Drugs, etc.	13,911.31
Saddlery, etc.	1,348.10	Special drugs and medicines	4,633.65
Shoes, etc.	7,528.65	Drug apparatus, etc.	16,355.09
Jewelry, etc.	2,763.72	Total	1,795,042.28
Musical instruments, etc.	4,423.45	Free by law	500,339.70
Arms and ammunition	22,997.04	Free by special concession	103,351.00
Furniture, etc.	10,315.24	Grand total	2,398,732.98
Stationery, books, etc.	13,957.95		

*Gold.

Imports in detail.

Articles.	Quantity.	Value.
Textiles.		
Cloth made of crude thread, kilograms	98,000	$15,685.00
Bramant, madapolam, and house ware made of cotton, do	85,055	68,044.00
Cassimere and woolen cloth, do	9,090	21,816.00
Flannel or tartans of cotton, do	15,190	12,152.00
Cotton goods, printed and white for dresses, undershirts, oxford drill, laces, satinets, and other similar things, kilograms	80,716	64,572.80
Ladies' cotton goods, called cambrics, batiste, muslin, crape, and other similar goods, kilograms	31,000	40,300.00
Unbleached linen and fine cotton goods, do	490,329	186,325.00
Linen azogado or guarani, do	32,782	13,112.80
Duck goods of hemp or mixtures, do	29,335	11,734.00
Cotton blankets or cotton ponchos, do	19,900	15,470.00
Woolen blankets or woolen ponchos, do	9,830	28,113.80
Cotton stockings in general, do	6,266	9,399.00
Thread stockings, do	188	1,128.00
Handkerchiefs and shalloons, marine, made of wool in general, do	7,360	23,552.00
Cotton handkerchiefs, do	8,267	12,400.50
Percales, chintz of cotton for dresses, do	86,855	78,169.50
Eatables.		
Oil in cans, kilograms	68,423	17,105.75
Rice from India and Bremen, do	729,610	36,480.50
Refined sugar, do	800,296	96,035.52
Grain coffee, do	30,710	10,784.50
Meal, do	131,470	13,147.00
Flour, do	1,509,300	75,465.00
Shelled corn, do	1,261,275	25,225.14
Common salt, do	2,700,000	16,200.00
Drinks.		
Bitter fernal and bottled aperitives, dozen	3,720	18,600.00
Bottled beer, do	7,405	14,810.00
Common Italian wine, in barrels or casks, liter	735,206	58,817.47
Common Spanish wine, in barrels, do	951,405	76,112.40
Bordeaux wine and its imitations, in barrels, do	221,897	22,189.70
Bottled vermuth, dozen	1,762	7,000.48

Imports in detail—Continued.

Articles.	Quantity.	Value.
Hardware.		
Galvanized plates, dishes, etc. (ironware)....kilograms...	29,840	$12,532.80
Manila rope (sisal)....do....	42,990	7,738.20
Corrugated iron for house roofing....do....	271,633	21,730.60
Hats.		
Ordinary woolen hats:		
For men....dozen...	1,922	7,688.00
For children....do....	1,725	5,175.00
Beaver hats and hats of hare and rabbits and of wool, down to ordinary, dozen	1,610	14,490.00
Fine hats of the above materials....dozen...	739	11,085.00
Mercery.		
Lace of cotton, wool, or mixed, imitation valenciana or crochet..kilograms...	2,221	8,884.00
Cotton thread on spools of 138 meters....dozen...	94,600	15,136.00
Perfumery.		
Agua de colonia, in bottles of 10 centimeters each....liters...	1,013	3,039.00
Fine extracts, in bottles of 5 centimeters....do....	303	3,030.00
Ordinary scented soap....kilograms...	7,996	3,198.40
Powder in general for the face....do....	3,039	3,039.00
NOTE.—Great quantities of Florida water formerly came from the United States, but now it comes principally from Germany, which falsifies the article.		
Arms and ammunition.		
Bullets and hunting ammunition....kilograms...	60,376	6,641.36
Common hunting powder....do....	13,450	4,035.00
Cartridges for revolvers and shotguns....do....	4,032	2,016.00
Empty cartridge shells....do....	4,421	2,652.60
Revolvers (ordinary 60: Fine 13)....	....	300.00
NOTE.—Many come in with revolvers on their persons, which escape duty.		
Ready-made articles.		
Empty bags of cloth....kilograms...	20,354	4,070.80
Cotton undershirts with long sleeves, down to ordinaries....do....	10,007	9,006.30
Crockery.		
Pane glass, including that for skylight, floor, etc....kilograms...	103,960	6,237.60
Molded glass in general....do....	48,081	2,404.05
Crockery in general....do....	73,900	3,195.00
Without tax or duty.		
Steel wire for fencing....kilograms...	656,370	398,382.22
Galvanized iron or steel wire....do....	252,880	20,230.40
Coal....do....	1,953,200	19,532.00
Iron, worked and unworked....do....	647,430	32,371.50
Printed gilt-edged books....do....	4,161	12,483.00
Sewing machines....number...	657	10,512.00
Machines in general, agricultural and industrial....	....	95,569.00
Fish glue....kilograms...	413,331	16,533.24
Calcined soda....do....	139,480	6,206.96
Flower and vegetable seeds....do....	8,629	4,314.50
Caustic soda....do....	60,350	4,224.50
Portland cement....do....	864,475	17,289.50
Wheat....do....	4,848,040	96,960.80
Iron machines....number	5	1,000.00
NOTE.—All of the above articles came in last year free—*i. e.*, all under the head "without tax or duty."		
Free by concession.		
Empty boxes for matches....kilograms...	24,680	17,276.00
Stearin....do....	99,393	29,817.90

I am told that the importations are much larger than officially given, because of smuggling. It will be seen that cotton goods have the largest sale, amounting to nearly $1,000,000 gold.

I would advise our exporters to send representatives with samples, and to sell goods at reduced prices for the purpose of introduction. It is not necessary to praise or describe them as American goods, but put them on their own merits. Give a responsible house the exclusive agency and grant the customary six months' credit.

JOHN N. RUFFIN,

ASUNCION, *May 1, 1899.* *Consul.*

SUGAR IN PARAGUAY.

Vice-Consul Harrison, of Asuncion, writes, under date of May 17, 1899:

Sugar cane is being cultivated in Paraguay to a larger extent than ever before, and is proving profitable. Each cane is about 2 inches in diameter and 6 to 8 feet high. One ton of sugar cane will give 35 to 40 gallons of juice, and each gallon of juice 1⅛ pounds of sugar. The cane grown here is of a good class and makes fine sugar and rum. There is only one sugar mill in the whole country, and this can not supply the demand. The importation of sugar into the country is very large, most of it coming from France. The sugar made in the country is selling at a very high price, and with American mills and skilled labor the quality could be improved to great advantage. Common labor is cheap, but skilled workmen are not procurable in the country.

The following is an estimate of the cost of a sugar plantation in Paraguay—capital, $138,000:

3 leagues of agricultural land at $800	$2,400
20 horses at $10	200
60 bullocks at $11	660
4 bullock carts at $20	80
100 tons of seeds (sugar cane) at $3	300
Freight and charges on above at $2	200
Clearing and cleaning and planting sugar cane	5,400
Fences, houses, and tools	5,000
Administration and office expenses	4,800
Law expenses and taxes and unforeseen	1,200
Capital required for first year	20,240
5 miles of plantation railway, 2 engines, and 50 trucks	22,000
Machinery, plants, tools, etc	26,860
1 steam launch and 2 barges	3,600
Distilling apparatus	1,500
1 steamer wharf and deposits	15,000

Buildings and electric lights	$9,000
Erection of machinery, etc	5,000
Cutting and planting sugar cane	3,000
Administration and office expenses	4,800
Freight, insurance, and shipping charges	5,000
Unforeseen	1,200
Capital required for second year	96,960
3 miles of portable railway trucks and switches	9,600
Freight and insurance and shipping on above	1,200
Administration and office expenses	4,800
Cutting and planting sugar cane	3,000
Insurance	1,000
Unforeseen	1,200
Capital required for third year	20,800

Product.

Mill and plantation will produce per annum 40,000 arroba of sugar at $1.10		44,000
6,000 demijohns of alcohol at $3		18,000
Gross income		62,000
Working expenses:		
Sugar mill	$14,000	
Steamer, launch, and barges	5,000	
Asuncion office and deposits	3,800	
		22,800
		39,200
Interest on capital invested first year ($20,240 for three years at 10 per cent per annum), interest on capital invested second year ($96,960 for two years at 10 per cent per annum), and interest on capital invested third year ($20,800 for one year at 10 per cent per annum)		27,544
Net profit		11,656

Consul Ruffin adds:

The sugar mill has been subsidized by the Government through the Agricultural Bank to the amount of $260,000 paper. It is situated on Tebicuary River and the Paraguayan Central Railway, thus affording easy transportation.

The factory is lighted by electricity. The capital invested amounts to $1,306,500.

The report of the sugar factory claims that $100,000 (gold) worth of sugar is imported each year into the country.

The company is in need of funds to conduct the business, their capital seeming to have been spent in the erection and equipment of the buildings.

A sugar enterprise would be profitable in Paraguay, because it would be almost without competition; and, should the supply be greater than the demand, the juice can be utilized in making cañia, the national drink of the country.

AGRICULTURE IN MEXICO.

Mexican farming is widely different from that in the United States. Irrigation is necessary in the greater portion of this country, and, on account of the scarcity of water, a large extent of land can not be utilized. When the owner of land has sufficient water for the purpose indicated, he holds on to his property and rarely can be induced to sell, as it is of permanent value to him. For the last three hundred years, large tracts of land have been owned by individuals or families who have spent heavy sums of money for canals and dams in order to make them productive. On account of this and the attending expenses of irrigation, there are fewer small farmers in Mexico than there are in the United States. Until recently, farming in Mexico has been on the primitive order, but the Mexican is an expert in irrigation, and if he can get the water his land becomes fertile and yields generously. During the last two decades, decided improvements have been accomplished through the introduction of modern implements into farming in Mexico. The increase in production corresponds to the improvements in farming apparatus. The great railroads of the country have been important factors in this advance, enabling farmers with a surplus of production to ship to those less fortunate.

The cost of labor is from 25 to 50 cents (12 to 24 cents in United States currency)* per day, depending on the locality. There are two crops of corn a season, upon which the farmer averages $50 ($24.05) per acre gross. Sugar cane, turned into piloncillo, or brown sugar, averages from $150 to $200 ($72.15 to $96.20) per acre gross; beans, from $60 to $80 ($28.86 to $38.48) per acre; rice, from $75 to $100 ($36.08 to $48.10) per acre; all other products realizing correspondingly high prices. Thus it will be seen that the profits of the farmer must be large. Hay is not made in any great quantity, but corn fodder is sold to advantage. Baled oat and wheat straw sell at from $50 to $60 ($24.05 to $28.86) per ton. Adjacent to cities, a lucrative trade is carried on in green barley and corn, which are cut before maturity and delivered in the cities to owners of horses and cows.

Cattle raising is, and has always been, a profitable business in Mexico, consequent upon cheap labor, low taxes, and the large tracts of cheap land which are suitable for grazing only. Until recently, no attempt has been made to improve the stock; but certain large cattle men have now undertaken to do this, and steady improvement

*Taking the valuation of the Mexican dollar, as estimated by the United States Director of the Mint, July 1, 1899, at 48.1 cents.

is certain henceforth. The demand created during the late war with Spain and the high prices which obtained in the United States increased the price of cattle to such an extent that the northern portion of the country has become depopulated of its stock, which, it is said, will take several years to replenish. This means a continuance of high prices in cattle in that quarter.

Dairy farming in the neighborhood of large cities is lucrative, milk selling at 50 cents (24 cents) per gallon, and butter at 75 cents to $1 (36 cents to 48.1 cents) per pound. Those engaged in this business make money rapidly.

Fruit and vegetable farming is beginning to attract attention. Formerly, this amounted to simply enough for the home market. Now, an effort will be made to supply the United States with early fruits and vegetables. The movement is in its incipiency, but it is destined to grow into large proportions. Oranges, lemons, tomatoes, beans, etc., are produced in Mexico from four to eight weeks earlier than in the United States. Hence, this will be a profitable business in the near future.

Wheat is cultivated in the high table-lands of central Mexico and is fairly profitable. It is not the equal of that grown in the United States either in quantity per acre or quality. Para and Bermuda grass give pasturage in many sections of the country. They are said to be equal to any in the world.

Parts of the country are adapted to the growth of tropical products, viz, coffee, vanilla, rubber, cocoanut, cocoa, etc., the quality of all being first class. It is said the best vanilla in the world comes from the State of Veracruz and the best cocoa from the State of Chiapas. The coffee of Michoacan is said to be equal to any; the tobacco of Veracruz is preferred by many to that of Habana, and the sugar production of southern Tamaulipas or northern Veracruz is said to be surpassed by that of no country save Hawaii in quantity, and it is more profitable to the producers, for the reason that seven to ten crops are the result of one planting, whereas the Hawaiian planters get only two.

Taken as a whole, farming in Mexico is an inviting field for persons of capital and intelligence.

JOHN K. POLLARD,
Consul-General.

MONTEREY, *June 20, 1899.*

BRICK FACTORY IN MEXICO.

The brick manufactory of Monterey, Mexico, was established in 1891 with a capital of $250,000 Mexican,* and has a concession from the Government exempting it from taxes for the period of twenty years. During the last three years, the company has shipped 6,500,000 brick, principally for the construction of sewers at San Antonio, Tex., and at present it is shipping 1,000,000 monthly to Mexico City for similar purposes. The annual output is about 24,000,000. There are 40,000 dry-pressed brick and 40,000 wet brick made daily, the wet being placed in drying sheds in piles for five or ten days and then in the oven, or kiln.

There are one hundred and fifty men employed and five or six boys, all told, the wages paid ranging from 62 cents to $2 Mexican (29.8 to 96.2 cents)† per day. Machinists receive $150 ($72.15) per month, and the foreman $130 Mexican ($62.53). The superintendent receives $150 ($72.15), as does also the burner (man who attends the kiln).

The wet brick are used in paving the streets, setting boilers, etc., and the dry for building purposes. There are nine kilns, six having a capacity of 280,000 and three a capacity of 400,000 brick. From twenty-five to thirty days are consumed in burning a kiln after the brick have been placed therein.

Dry-press and mud brick, standard and fancy shapes, and tiling for paving and roofing are among the products of this enterprise. The plant is situated on the main line of the Monterey Mineral and Terminal Railroad, facilitating the loading of brick into cars.

The machinery comprises one Ross Keller, six mold dry-press machines with a capacity of 40,000 brick daily, and two Pendleton mud-brick machines with a capacity of 40,000 brick daily.

Owing to the large increase in the demand for their product, the company has installed an electric-light plant, and the works run day and night, which will increase the output considerably.

The clay from which the brick are made is of a very fine quality, and is of a deep crimson color after being burnt. There is enough clay in sight to supply the plant for a period of twenty-five or thirty years or longer. It is conveyed to the machines by means of a mule tramway and cable, thirty mules being used for this purpose.

There is quite an extensive commissary at the plant, where the

*In 1891, the Mexican dollar was valued at about 75 cents in United States currency.

†Taking the valuation of the Mexican dollar, as estimated by the United States Director of the Mint, July 1, 1899, at 48.1 cents.

workmen can buy all their supplies at current market rates; there are also houses for them to live in. The officers of the company are J. A. Robertson, president; J. H. Robertson, vice-president and general manager; T. A. Robertson, secretary and treasurer; and L. J. Heder, assistant manager and superintendent—all Americans.

JOHN K. POLLARD.
MONTEREY, *June 20, 1899.* *Consul-General.*

NEW RAILROAD LAW OF MEXICO.

The Department has received from Ambassador Clayton, under cover of a dispatch dated Mexico City, June 14, 1899, copy and translation of the new railroad law of Mexico, promulgated April 29, 1899. A copy has also been received from Consul-General Barlow, of Mexico City, under date of June 14. Mr. Clayton says:

Heretofore, each concession has been the subject of a special law. The general law will hereafter apply to all new concessions, and to all concessions previously granted the terms of which do not conflict with this law.

The new law renders it more difficult to obtain subsidized concessions, and accentuates the control exercised by the Government over companies.

Railroads are divided into those of general and those of local interest. Only the former can be subsidized. Among those of general interest, the law designates those of prime importance yet to be constructed. Such are the lines to connect the central network of railroads with the Pacific Ocean and the Isthmus of Tehuantepec, Yucatan, and Guatemala. Lines of prime importance may be subsidized. Other projected lines may be declared to be of prime importance upon the advice of the cabinet.

Formerly, the supervision exercised by the Government was technical—to secure regularity of operation and safety of passengers. In the future, the inspectors appointed by the Government may also call for an account of the financial operations of companies, issues of shares, their obligations, sinking funds, etc. They will have power to examine the books and all papers relating to the company. This supervision will also be exercised over the formation of new companies. Hereafter, a company must first submit to the Government an estimate of the work to be performed on the proposed road, and the amount of capital stock to be issued will be determined from the projected work. It is intended thus to prevent the formation of companies with a capital stock disproportionate to the proposed enterprises.

This law forbids, under penalty of forfeiture, the selling or hypothecating of concessions to any foreign state. Any shares, bonds, or obligations purchased by a foreign state shall be forfeited to the Mexican Government. The property of railroads in Mexico shall be subject to the civil code of the Federal District, except as provided by special law.

The law of December 25, 1877, and that of December 16, 1881, excepting the article relating to the acquirement of telegraph and telephone lines by the Government, are repealed.

The full text of the new railroad law is filed for reference in the Bureau of Foreign Commerce.

BIDS FOR RAILS IN BRAZIL.

Minister Bryan sends from Petropolis, June 16, 1899, a newspaper extract announcing the opening of bids for furnishing rails and accessories to the Central Railway of Brazil. The extract, translated, reads:

On the 12th day of August, 1899, at 12 o'clock, proposals will be received for furnishing the following:

40,000 meters (43,600 yards) of steel rails, Type C.

8,000 plates for joining rails (4,000 square bores and 4,000 round bores).

5,000 screws for binding.

00,000 chairs.

3 crossings complete of 1/8.

55 crossings of 1/9.

24 crossings of 1/8.

55 pairs of switches with working apparatus.

20,000 joining plates for Rail B (10,000 square bores and 10,000 round bores).

Bids must state the eligibility of the manufacturer, term of delivery, and the prices. Only bids from well-known firms of undoubted standing will be considered.

The designs, specifications, and terms of the contract are kept in the central office, to be examined by competitors. Persons wishing to compete must present themselves at this office at the hour above indicated, bringing sealed bids, dated and signed, with their place of residence indicated, and in the deed of delivery must be shown the receipt of the deposit of 2,000 milreis ($1,080) in the treasury of the railway, as a guaranty of good faith.

The bidder whose offer is accepted must sign the contract within eight days, counting from the date of communication of the same. In event, however, of refusal or failure, the deposit above referred to will revert to the railway.

The bids will be opened and read in the presence of the parties interested.

FOREIGN JUDGMENTS IN BRAZIL.

Foreign laws have no extraterritorial force except by comity, and the extent to which a state shall permit its own jurisprudence and institutions to yield to those of another is a matter to be decided by each country in the exercise of its sound discretion. Generally, force and effect will be given by states to the laws of other states when they are applicable, unless they affect injuriously its own citizens, violate its express enactments, or are contra bonos mores. No state, nevertheless, carries its sense of international courtesy to the extent of permitting criminal matters to be affected thereby. Rules of comity apply only to civil judgments and not to criminal decisions.

Out of the confusion of judicial decisions on the effect of foreign judgments, this much seems to be settled everywhere: Judgments and decrees of foreign courts relating to immovable property within their jurisdiction are held to be binding, and the rule is the same as to movables actually within their jurisdiction (Story, Conflict of Laws, sec. 592; 1 Greenleaf on Evidence, sec. 541; Bouvier's Law Dictionary). And Story and Greenleaf support the statement of Bouvier that—

> Judgments in personam, regular on their face, which are sought to be enforced in another country, are conclusive evidence, subject to a reexamination in the courts where the new action is brought only for irregularity, fraud, or lack of jurisdiction as to the cause or parties.

The following, in translation, are the provisions of the law of Brazil relating to foreign judgments and decrees, taken from the Compilation of Federal Laws, approved November 5, 1898, decree No. 3084:

CHAPTER 2.—CONFIRMATION OF FOREIGN JUDGMENTS.

ARTICLE 7. Judgments rendered by foreign courts shall be executed after previous confirmation by the federal supreme court upon hearing the parties and the attorney-general of the Republic.

ART. 8. Judgments of foreign tribunals, civil or commercial, may be confirmed only after the following requirements shall be complied with:

(1) They shall have the necessary formal prerequisites to execution prescribed in their respective states.

(2) They shall have been pronounced by a court of competent jurisdiction, the parties having been duly summoned or their failure to appear having been legally verified, according to the provisions of local law.

(3) The proceedings must have been carried to judgment.

(4) Such decrees shall be duly authenticated by the Brazilian consul.

(5) The decrees shall be accompanied by translations into the vernacular.

ART. 9. Notwithstanding the said judgments conform to the requirements of the preceding section, they shall not be confirmed in case they embody decisions in derogation of public order or contravening the domestic public law of the Union.

ART. 10. In proceedings confirmatory of foreign judgments, the following regulations must be observed:

(1) The public prosecutor shall give notice to the parties against whom execution is sought, to submit their defense within eight days from the date of such notice, the demandant being allowed an equal period to reply.

(2) The following constitute valid defenses:

(*a*) Any doubt respecting the authenticity of the documents or the wisdom of the decision.

(*b*) Absence of any of the prerequisites enumerated in articles 8 and 9.

In all cases, the production of any proofs touching the grounds on which the adjudged suit was decided is admissible.

(3) After the answer is filed, or at the expiration of the time for filing the same, the attorney-general of the Republic shall take the matter up, and the papers shall be submitted, with his opinion, to the public prosecutor and successively to two revisers, according to the forms prescribed in appeals.

(4) If the judgment of the foreign court is confirmed, an instruction shall issue to the judge of the district to which the case belongs, authorizing execution of the judgment.

(5) In case the execution of a foreign judgment shall be sought through diplomatic channels and the demandant shall not appear, the court will name a curator to represent his cause, who shall take in his name all necessary steps in the proceedings.

The same proceedings shall take place with respect to the person proceeded against, in case he shall not appear, or shall absent himself from the jurisdiction, or if he is a minor or interdicted.

ART. 11. Proceedings upon executions and the various methods and incidents of the same shall be regulated by the laws, forms, and practices that are in force in the Republic for the execution of domestic decrees of the same nature.

The interpretation of the decree and the effect of the same shall be determined by the law of the country where such decree was obtained.

ART. 12. Within the period of six days allowed for seizure in personal actions and ten days in real actions, the defendant shall have the right to submit defenses that do not involve the nullity or infringement of the final judgment.

ART. 13. When judgment shall be rendered in derogation of the execution of the decree, the papers, documents, and other proofs on which the same was founded may be offered in actions which for the same object may be tried before the courts of the Republic, and the same shall be accepted for their legal value.

ART. 14. The following foreign decrees may be executed without the formality of confirmation by Brazilian courts:

(*a*) Foreign decrees of partition.

(*b*) Foreign decrees that are merely declaratory, such as those affecting personal status.

(*c*) Arbitral decrees confirmed by foreign courts.

ART. 15. Foreign decrees of bankruptcy in the case of a merchant domiciled here, being a Brazilian citizen, can not be executed in Brazil.

ART. 16. Foreign decrees which declare bankrupt merchants having their domicile in the country where such decrees are pronounced shall take effect in this Republic after their confirmation, except in the following cases:

(1) Independent of confirmation, and upon exhibiting the decree and order in proper form, naming the persons interested in the property, these persons can demand proceedings to preserve their rights therein, collect debts, effect settlements (if they have powers for this purpose), and institute suits, without the necessity of giving security for the costs.

(2) All acts involving the execution of decrees, such as the collection of goods and their sale at auction, may be undertaken only after the decree shall have been made executory by confirmation, upon the order of a Brazilian judge, his action being regulated by the laws of his country.

(3) Notwithstanding that the foreign decree of bankruptcy shall have been declared executory, the creditors domiciled in the Republic who may have mortgages on property situated here are not inhibited from demanding their loans and holding the properties.

(4) Specialty creditors domiciled in the Republic who have judgments against the bankrupts at the date of the confirmation shall be empowered to proceed to final process and to take out execution on the properties of the bankrupt situated in the Republic.

ART. 17. A foreign decree of bankruptcy affecting a merchant who has two establishments, one in the country of his domicile and another distinct and separate in the Republic, after confirmation, shall not comprehend in its effects the establishment existing in the Republic.

ART. 18. Agreements and other proceedings taken to prevent or delay declarations of bankruptcy confirmed by foreign courts remain subject to confirmation in accordance with the terms of the preceding articles, and shall be obligatory on creditors resident in Brazil only when they shall have had notice to take part in the proceedings.

ART. 19. In case there shall be a treaty or convention regulating the execution of foreign decrees, the provisions of the same shall be observed.

ART. 20. Letters rogatory emanating from foreign authorities do not require confirmation, and they shall be carried out after the exequatur of the Federal Government shall be obtained, their due execution pertaining exclusively to the district judge of the State where the proceedings sought are to be executed.

All favor shown foreign judgments is practically nullified by the provisions of section 10, which provides that the wisdom of the judgment may be inquired into, and that the grounds of the decision of the foreign court may be reviewed in all cases by the defense here; so that judgments are capable of execution here only after being subject to a reexamination, in the nature of a new trial; and the local court may pass in review the facts of any case, and decide as to whether the foreign judgment was pronounced on good ground or not.

There exist no treaty regulations respecting the effect to be given foreign judgments and decrees of the United States in the courts of Brazil and vice versa.

FRANK D. HILL,

SANTOS, *April 27, 1899.* *Consul.*

JUDICIAL REFORMS IN ARGENTINA.

Having had unpleasant experience in courts of justice in claims for collection for American citizens, I am glad to report that on yesterday the long-expected bills embodying judicial reforms were formally laid before the Chamber.

The President proposes to maintain the organization of the supreme court as defined by the law of October, 1862, modifying the status of the attorney-general, who will cease to be a member of the court and be simply a representative of the ministry. Its jurisdiction as a court of appeals is to apply as follows: In validity of national or provincial government action; in decrees of nullity against sentences of the superior court (to be created); in naval and maritime cases, for amounts not exceeding $5,000 or not provided for by the commercial code; in civil and commercial actions for a like amount, provided always that the action does not arise from the circumstance of the litigants being one an Argentine and the other a foreigner, or living in different provinces; in sentences pronounced in ordinary cases of summary jurisdiction for more than $5,000, when there is no appeal in the ordinary course; in sentences in cases of sedition, rebellion, treason, or attempt against the life of the President, the ministers, or members of Congress.

In this way, the supreme court has a higher jurisdiction and is relieved of cases of purely private interest, which on appeal will go to the superior court, a new tribunal to hear appealed cases other than those reserved for the supreme court.

In actions for less than $1,000, there will be no appeal from the sentence of the federal judges.

The chambers of appeal will be one for civil and one for criminal cases, the former consisting of seven and the latter of five members.

The bill also provides for special tribunals for the trial of causes for amounts not exceeding $4,000.

The office of justice of the peace is to be retained, those holding it not being necessarily lawyers, but "good men," who will act according to equity, etc.

For lesser cases, another chamber in the civil chamber is to be formed, composed of five members, to consider appeals from the lower courts.

Criminal procedure is to be radically modified. Five judges of instruction and sentence will be appointed and will together definitely pronounce sentence.

A jury of impeachment is to be formed for the removal of magis-

trates, which is to declare when the latter fail in fulfilling their duties. This tribunal or jury is to be so constituted as not to interfere with the independence of the judges, but to avoid abuses arising from their immovability.

The bill also provides for enlarging the functions of the public ministry, specifying its duties, the responsibility of its agents, etc.

D. MAYER,

BUENOS AYRES, *May 10, 1899.* *Consul.*

PROPOSED ARGENTINE TARIFF.

Knowing the interest taken by our manufacturers in the subject of the customs tariff here and in other countries, I hasten to say that the Argentine Executive has just transmitted to Congress the budget law for next year. This law includes the customs-tariff project proposed by the executive power for 1900. Although this may be modified in some manner by Congress, I am inclined to the belief that the recommendations will be adopted.

In referring in the message accompanying the budget law to the question of customs duties, and especially to the additional customs duty of 10 per cent now in force, the executive power says:

> This special tax was established in moments of supreme expectancy, in the name of high and sacred considerations of national security, and with the purpose of applying the product therefrom toward satisfying the extraordinary requirements of the nation at that moment. The public powers obligated themselves as well to suspend the tax by decree as quickly as the then existing state of things disappeared or became modified.
>
> These considerations, fortunately, do not now exist; but I find myself obliged to propose the continuation of the financial burden which this additional duty imposes upon the country, seeing that, although no reason of national security argues its imposition, there is still to be canceled a debt of importance, previously contracted, the object of which is well known.
>
> Notwithstanding, in order to make this additional duty less onerous, I have sought to distribute the sums which it represents among the principal schedules of the tariff law, seeking to lighten those that are found most heavily burdened and to burden those that are less; and, after a comprehensive study, I believe that the method contained in the proposed customs law reconciles, as far as it is possible, the interests of the consumer and the revenue necessities of the State.

In accord with the views thus expressed, the executive power recommends that the 10 per cent additional duty spoken of be merged for 1900 into the regular duty in the following manner: Where the present ad valorem duty is 25 per cent, it is to be raised to 35 per cent; where it is now 50 per cent, it is to be raised to 60 per cent; where it is now 40 and 45 per cent, both are to be raised to 50 per cent; where it is now 15 and 20 per cent, both are to be

raised to 25 per cent; where it is now 10 per cent, it is to be raised to 20 per cent; and where it is now 2½ and 4 per cent, both are to be raised to 5 per cent.

Specific duties are to be proportionately raised, but it is impossible from the message to state just how or to what degree. On this point, the executive power says:

With regard to specific duties, the increases fixed in the project are based on an average taken from the values fixed in the law in force.

With regard to the proposal made by the press here to abolish the export duties now in force upon agricultural products, the message says:

Compelled from the same considerations (referring to the reasons given for continuing the extra 10 per cent tax), I see myself, says the Minister of Hacienda, obliged, in opposition to a strong personal desire, to sustain the duty established upon the exportation of cattle and sheep products. I should have liked to propose the repeal of that duty, which falls on the gross production of the principal industry of the country, placing it at a disadvantageous position to compete with like articles in the consuming markets abroad, but the necessity of meeting the payment of the debt contracted to prepare for the national security, as well as the duty of proceeding to the construction of works called for by imperative considerations of hygiene and general progress, prevent me at present from realizing this wish. The export duty will continue to figure in the revenue which makes up the national treasury.

WILLIAM I. BUCHANAN,

BUENOS AYRES, *May 30, 1899.* *Minister.*

TARIFF CHANGES IN SALVADOR.

Consul Jenkins, of San Salvador, under date of June 12, 1899, sends translations of recent tariff decrees, as follows:

DECREE OF APRIL 28, 1899.

The National Assembly of the Republic of Salvador, considering that, in order to protect the industry of the country, it is necessary to make some alterations to the tariff of custom-house duties (tarifa de aforos) now in force, using the faculties granted by the constitution, decrees:

The tariff now in force is hereby altered in the following terms:

	Pesos.	U.S. cur.*
Cotton, in drills of every description.....per kilogram...	0. 75=	$0. 332
Cotton, in stuffs (as mantadril), white or colored, striped or checked, per kilogram.....	.75=	.332
Cotton, in towels, bedclothes, napkins, tablecloth or stuffs therefor, per kilogram.....	.60=	.265
Linen, pure or mixed, in white or colored drills.....per kilogram...	.60=	.265

This decree will come into legal force on the day of publication.

*Taking the peso valuation of the United States Director of the Mint, July 1, 1899, as 44.3 cents.

DECREE OF MAY 26, 1899.

The President of the Republic of Salvador, considering that it is to the interest of the Republic to facilitate the importation of raw materials employed in the industries of the country and to tax the introduction of those produced or manufactured therein, decrees:

ARTICLE I. The introduction of the following articles will be free of duties and taxes:

Manure.

Cotton, raw, white or colored, for weaving or in yarn.

Iron vessels for balsam.

Filters and distillers of every description.

Scientific instruments of every description.

Weaving frames of every description.

Printing and lithographic inks.

Prepared chalk for use in schools.

ART. II. There will be a 50 per cent reduction of the duties on the following articles:

Steel in bars, sheets, or plates.

Sulphur in pieces.

Cotton tape, plain or twilled, white or colored, for shoemakers and saddlers, and tape commonly called "de castilla."

Tar of all kinds.

Empty common bottles and demijohns.

Whalebone, finished or raw.

Buttons of mother-of-pearl, silk, wool, or of any description not specified.

Copper hooks and eyes of every description.

Copper and brass in bars and sheets.

Glue of every kind.

Cork in all forms.

Tanned leather, dressed sheepskin, morocco or chamois leather for shoes, upper leather, and any other kind of skins, dressed and unvarnished, not specified.

Elastic for shoes or other uses.

Rushes, straw, and palm for furniture.

Thermometers and test tubes for liquors.

Cardboard for bookbinding, lithography, photography, or any other industrial use.

Paper for making flowers.

Grind or whet stone, for sharpening razors or tools.

Ramie in thread or raw.

Silk, twisted or raw, and every kind of silk thread, on spools or cardboard, and silken network for sieves.

Soda, or caustic potash, for use in industry.

Poison for tanning skins.

ART. III. A 50 per cent surtax will be charged on the following articles:

Cotton bedclothes, towels, cloaks, hammocks, napkins, and tablecloths.

Cotton lace, cloth, and embroidery.

Cotton shawls, and stuffs to make them with.

Pillows and mattresses of feathers, wool, bristles, or any other material.

Bitters.

Plows, machetes, and cutlasses, to be used for work.

Coffeepots, napkin rings, tumblers, candlesticks (candeleros y palmatorias), of tin.

Manufactures in tortoise shell of every description.

Preserved meats and shellfish.

Wax candles.
Locks and keys for doors.
Candies and preserves.
Envelopes.
Manufactures in leather, shoes, leggings, boots, belts, with or without trimming or ornaments of gold or silver, including those of patent leather, patent or common leather straps of every description, saddles, stirrup leathers, harnesses, headstalls, halters, cruppers, pistol pockets, reins, powder flasks, cases, gear of leather, rugs, hides, pelts, and, in general, any article manufactured of tanned or patent leather.
Sweets.
Iron spurs.
Artificial flowers.
Flowers of any kind.
Fireworks.
Bridles of any kind for horses.
Sirups of any kind, without alcohol.
Furniture of wood, with or without parts of marble, of any description.
(Wood prepared in pieces for furniture will be considered as furniture and taxed as such.)
Iron daggers and poniards, picks (picos), axes, and pieces for connecting saddle bows.
Implements or articles for domestic use of tin.
Combs of every description of tortoise shell.
Bunches of feathers prepared as dusters.
Ready-made suits of any material.
Tallow candles.
Silk, pure or mixed, in shawls, capes, waists, and jackets.
Cheese and butter.
Vinegar.
ART. IV. This decree will be applied on all kinds of goods coming into the Republic from the 1st of next September.

SUGAR INDUSTRY IN TRINIDAD.

Minister Loomis sends from Caracas, under date of June 14, 1899, a clipping from the Port of Spain Gazette, setting forth the condition and prospects of the sugar industry in the island. Trinidad, says Mr. Loomis, is one of the most successfully governed and prosperous of the British possessions in the West Indies and is a model colony. The largest cane factory in the West Indies is the Usine St. Madeleine, referred to in the article. About nine-tenths of the machinery with which the factory is equipped came from the United States.

The article reads, in part:

The last crop season has presented some remarkable features, well worthy the attention of others beside planters, because they are indications of material progress. First, there has been the expansion of the cane-farming system to a degree which will be best realized from its financial side. Over $100,000 have been paid

to cane farmers during the last four months, and this, with other expenses entailed, accounts for the dearth of notes and gold at the Colonial Bank. * * * The flux and reflux of money in the colony indicates a more prosperous condition of things than was previously the case. In view of the fact that no abnormal change has taken place in the cocoa production, it must be due to the improved prospects of the sugar industry.

The study of this material change for the better presents some interesting features. We first perceive that this year's sugar crop is a large one, exceeding the average of 56,000 tons. Nearly one-fourth of the crop has been made by the Usine St. Madeleine, whose output to the closing day this week is 13,000 tons—an increase of 1,500 tons over the output of last year. This Usine is the premier central factory in the West Indies since the war in Cuba, where previously the Constancia factory and two others exceeded the output of the local Usine. A characteristic of the crop operations has been not only that farmers' canes have been plentifully bought by the factories, but that one or two estates which were threatened with abandonment have continued to exist by also selling their canes to the factories. * * * Another notable feature of the sugar crop this year was the effect of the American countervailing duties, in putting new life into the local and Demerara sugar industry. The same result has been reported in the case of Mauritius in consequence of the imposition of the Indian countervailing duties. The planters of that island are now shipping sugar at renumerative prices to India. And yet, there has been no great rise in the price of sugar to startle the American or Indian consumers; but a fair market has had its inevitable result for an industry enabled in the nature of things to hold its own, and only prevented from doing so for some years past because of markets artificially rigged by the European bounties. This affords a clear demonstration of the beneficial results that would accrue to the West Indian sugar industry if countervailing duties were imposed by England.

COFFEE IN JAMAICA.

Consul Dent transmits from Kingston, under date of April 25, 1899, a letter to a Connecticut correspondent,* containing a short report on coffee, prepared by a well-known planter in the island, as follows:

COFFEE GROWING.

I have been coffee planting for the last twenty years, and during that time I have twice seen a fluctuation of prices of 60 per cent; and the average prices I have realized have varied from 89s. 6d. to 42s. per cwt. ($21.78 to $10.22 per 112 pounds). This large difference in values, combined with a very great uncertainty as to crops—these being dependent upon the proper distribution of the rainfall and not upon the cultivation—makes coffee planting difficult. When I say the crop is not dependent on the cultivation, I mean that, however good the cultivation may be, without proper weather there will be no crop. With practically the same acreage as now—*i. e.*, 330 acres—my crops have ranged from 22 casks of 850 pounds to (in one year) 154 casks. The best seasons may be said to be: A dry January and February to rest the trees after the previous crop; showers to bring out blossoms—the best is a general bloom in April; then good rains in May and a not too hot July and August. If the latter months are hot, the crop is likely to be burnt before it is mature. The low prices are attributable to the immense production of coffee in Brazil.

*To whom Advance Sheets have been sent.

When once coffee growing is well established, 4 cwts. (448 pounds) per acre may be expected, and this return should last for fifteen years at least. It may vary considerably from year to year; thus, after a very heavy crop, say 6 cwts. (672 pounds) or even 7 cwts. (784 pounds) per acre, the return would be proportionately small; still, 4 cwts. per acre should be about the return in good land, and without fertilizers should last fifteen years. In this part of the island, we expect coffee to bear for twenty years after the first bearing, say twenty-five years from the time of planting.

COST OF CULTIVATION.

Speaking roughly, the cost of land, fencing, planting, cultivation, and all other charges should come to £15 ($73) per acre by the end of the fifth year—that is, the year when one may reasonably expect a crop; a small crop would be reaped possibly the third or fourth year, but it is not good for the trees. I think that a fair estimate of the cultivation, reaping, and curing of the crop per acre, including 10 per cent for supervision and 10 per cent for extras, is £5 ($24.33) for a return of 4 cwts. of clean coffee fit for sale.

The price of land varies very much, but, generally speaking, £1 ($4.8665) an acre has been considered fair value. Of course, there are lands to be had at much lower prices; the Government lands sell at about 5s. ($1.22) per acre. In short, there is no regular price, values being determined by the situation. It would be useless to undertake coffee planting unless there is plenty of labor, as much is needed for weeding, pruning, and reaping.

As to the price of land in coffee, I should imagine that about £20 ($97.33) an acre for old and £30 ($146) for young coffee would satisfy most people.

Rye crops could not be planted between the rows of coffee trees, though orange trees might be planted at this altitude (2,200 feet) in place of other shade trees. During the first three years, some sort of shade is necessary, and it is the custom to plant yams, cassava, cocoa, etc., but this should be done sparingly, as undergrowth is not good for the trees.

WEATHER.

The climate here has averaged 72° F. in the shade for years. In the summer, it rarely goes above 80° F. We have two rainy seasons—one in May and one in October.

It is always healthy in the coffee-growing districts, as the best altitude for that industry is between 2,000 and 4,000 feet. In this parish (Manchester), we are dependent for our water supply on rain caught in tanks.

PLAN FOR CONTROLLING COFFEE MARKET.

Minister Loomis writes from Caracas, June 3, 1899:

I inclose an article from the Venezuelan Herald, published in this city, which sets forth a plan for controlling the coffee output of the New World.

The project is interesting as an evidence of the hard straits in which coffee growers in this and some other countries find themselves, by reason of the extremely low price which their product commands.

Unless the price of coffee is advanced considerably within a year or two, a great many estates will have to be abandoned and the attention of the owners given to the cultivation of more profitable crops.

CONTROL OF THE COFFEE MARKET.

The late Señor M. J. Olavarria advanced a proposition for the formation of a league of all the coffee-producing countries, with the object of controlling the price of coffee. He estimated that the coffee producers of the Latin-American republics, under the conditions prevailing, are losing about $16,000,000 per year, of which about one-half falls upon the Brazilian producers. Calculating the total production of the world at 13,000,000 bags of 132 pounds each, and the consumption at 12,000,000 bags, Mr. Olavarria considered that the fall in price is due to overproduction. He appealed to the Government of Venezuela to take the initiative by inviting the governments of other American producing countries to a conference, with a view to the formation of a coffee combination. The duties of this conference will be the restriction of the output, the formation of a central committee to control the sales, the imposing of a general export duty of 5 francs ($1) per bag (the proceeds to be applied to buying up the surplus exports), and, generally, the adoption of measures to increase consumption and decrease import duties on coffee in other countries. The production for all markets is to be restricted to 10,500,000 bags per annum, of which Brazil shall be permitted to export 6,600,000 bags, and the remainder is to be divided among all other countries.

CANADIAN CANAL PROBLEM.

The Province of Ontario is becoming alarmed over the seeming decadence of the Welland Canal, and strong pleas are being made for harbor improvements at Port Colborne, its Lake Erie terminal. It is urged that the lack of harbor facilities at that port is largely responsible for the loss in traffic. The harbor is in the same condition that it was seventeen years ago, when the Welland Canal was opened. The lake vessels now require such a depth of water that none of the larger class attempt to enter Port Colborne.

The Welland Canal is 26¾ miles in length, connecting Lake Erie and Lake Ontario by cutting through the narrow Niagara peninsula. There is a fall of 326¾ feet in the 27 miles of canal, necessitating twenty-six locks. These locks are 270 feet in length by 45 feet in width. The canal has a depth of 14 feet, and when it was opened it was supposed that provision had been made for the largest lake craft. But the deep Sault Ste. Marie Canal has permitted the construction of such immense freight carriers that most of the vessels which could navigate the Welland Canal have been driven out of the carrying trade.

When the vessels became too large to enter the Welland Canal,

lightering was resorted to. The Grand Trunk Railway built a branch line parallel with the canal. Enough of the cargo was transferred to the railroad to enable the vessel to pass through the canal, and then the cargo was taken on again at the other terminal. This expedient has worked fairly well until recently; but in the meantime the lake vessels have been growing in size each year, and with each increase came lower freight rates, driving the smaller vessels out of competition. Steamers with 200,000-bushel capacity now control the grain-carrying trade, and these can not enter Port Colborne Harbor. The vessels that can enter are growing less in number each season, and soon even the expedient of lightering vessels will not suffice to bring traffic to the canal.

While the Government admits the necessity of a better harbor, it seems unwilling to take immediate steps toward providing one. It is urged that this will prove of only temporary value unless the canal is enlarged as well; and if the canal is enlarged so as to admit the largest lake craft, there would still be heavy expenditures required on the St. Lawrence route, which does not even have a 14-foot channel for its entire length, although that depth is expected to be secured this season.

The Welland Canal, up to date, has cost the Government $24,173,352. Its best year in tonnage was 1893, when 1,294,823 tons of grain and merchandise passed through it east and west. Since then, the decline in grain shipments has been especially marked, although the grain traffic on the lakes increases every year. In 1893, the grain that passed down the Welland was about 16 per cent of the grain receipts at Buffalo; in 1898, it was about 9 per cent, or a loss of 43 per cent as compared with Buffalo. The grain that passed down the Welland last year was less than five years ago, while the grain receipts at Buffalo were nearly three times what they were ten years ago.

HARLAN W. BRUSH,
Consul.

CLIFTON, *May 31, 1899.*

NOTES FROM DAWSON CITY.

Consul McCook sends, under date of May 24, June 8, and June 20, reports in regard to conditions in Dawson City and vicinity. The city, he says, is being rapidly rebuilt after the recent fire. The following extracts are from his reports:

There is a great deal of activity in shipping at present; at one time, there were seventeen steamers at the various landings. The boats are providing improved accommodations for passengers, and I do not see why excursion parties are not organized to come and see

this land of gold, now that traveling is made so comfortable. I should think a trip up the Yukon would be more interesting to Americans than a trip up the Rhine.

The bulk of passenger and freight traffic will hereafter come by the upper river route, several lines of steamers connecting this port with Lake Bennett. The rates from Dawson to Puget Sound are: First class, $185; second class, $160; but these will probably be reduced one-half as the season advances. The rates charged by the companies running boats to St. Michael's, there to connect with ocean steamers, are $150 first class and $100 steerage. No second-class mail matter will be brought in or sent out for the present, as the rates are too high. No second-class mail matter was received all winter, and if anyone wishes to send papers or magazines to their friends, they should mail them as first-class matter.

Instead of $20,000,000, which was reported as the probable output for this district for the past twelve months, I am informed that $10,000,000 will fully cover the product. Reports from Alaska indicate that more gold will be found there than will ever come from this territory. Alaska is rich in placer mines, but requires development. Very little prospecting was done here last winter. The miners simply ate up their grub and waited for someone else to report discoveries of gold. If the indications are good, they go on a stampede, dig a hole or two, and if they can not find pay dirt at once, they say the creek is no good and return. This country requires indomitable pluck and energy. It is very difficult to take care of one's health, as the canned food and poor cooking are hard on the system. Typhoid fever has already broken out—six weeks earlier than last year. The ground upon which the city is built is being drained, $13,000 having been spent on this work. There are several hundred destitute persons in Dawson, who want to get out of the country and have not the means.

The city is overcrowded at present, most of the work on the mines having ceased for the season, and the gambling fraternity and saloons are reaping rich harvests. At the junction of Eldorado and Bonanza creeks, 14 miles from here, quite a town has sprung up since last year, chiefly composed of gambling houses. All sorts and conditions of men are found in this country—doctors, lawyers, politicians—working at anything they can find to do. At one gambling table there sat recently four men, three of whom had been chiefs of police in cities in the United States, and the fourth a well-known Pinkerton detective. The authorities are now fining the gambling houses, however; and, in spite of all the drinking, etc., order prevails. Dawson is comparatively quiet and safe, and the laws are enforced.

MINING IN SZECHUAN.

The Department has received from Minister Conger, under cover of a dispatch dated Pekin, April 25, 1899, copy of the regulations for the working of mines in the province of Szechuan, according to the contract between the Chinese Government and Mr. Pritchard Morgan. The contract, says Mr. Conger, has just received imperial sanction. The regulations (copy of which has also been forwarded by Consul Fowler, of Chefoo, under date of May 13, 1899), read:

REGULATIONS FOR THE WORKING OF MINES IN SZECHUAN UNDER CHINESE AND FOREIGN DIRECTION BY THE HUA YI COMPANY, ESTABLISHED FOR THE PURPOSE BY THE SZECHUAN MINING BUREAU, AND THE HUI TUNG COMPANY ACTING IN COOPERATION.

(1) The Szechuan mining bureau establishes the Hua Yi Company, by whom an agreement is drawn up with the Hui Tung Company that the work is to be done by Chinese and foreigners conjointly to their mutual benefit. Profits are to be divided proportionately, so as to avoid trouble and disputes.

Both companies shall obey all the regulations mentioned in the agreement and the existing rules memorialized and adopted by the head office.

(2) The Hua Yi Company is to subscribe a sum of 1,000,000 taels* for the purchase of land. This must be Chinese and not foreign money.

This company is to buy and own all mining lands and carry out all negotiations. The Hui Tung Company have no interest in the prices of land, whether dear or cheap, nor with the amount of capital spent or reserved. When the Hua Yi Company has bought the land and obtained the right to open mines, the same is to be handed over to the Hui Tung Company for working. In the Hui Tung Company there are foreign merchants; they are not to be allowed to buy mining property from any other Chinese, so as to avoid all complications.

(3) The Hui Tung Company, with a Chinese managing director and a foreign assistant director, is to prepare a working capital of 10,000,000 taels, to be formed first of 50 per cent Chinese shares and next 50 per cent of foreign shares.

Shareholders of all nationalities are allowed to take shares out of the 50 per cent allotted to foreigners. There can be no monopoly for any one country. Now, Mr. Morgan, an English merchant, has taken shares and undertakes to assist in carrying out the work. Shareholders of all other nationalties who should hereafter take shares will be supplied with share certificates, paid dividends, and refunded capital according to the number of shares they take. Should any other country also start a company on the same lines with both Chinese and foreign shareholders, the mines of the one company will have to be kept distinct from those of the other. Different prefectures and districts will be granted to each company to work in, and their proceedings should be regularly reported to the head office; but the rules and regulations of this agreement must, however, be complied with by all to prevent any unfairness. Any company composed of foreign shareholders only and no Chinese shareholders shall not be allowed to work any mines.

(4) The Hui Tung Company is to send out mining engineers to find out what

* The value of the haikwan tael was estimated by the United States Director of the Mint, April 1, 1899, as 71.4 cents.

mines are worth opening. This company is then to consult with the Hua Yi Company to make maps and insert explanations and submit the same to the mining bureau of Szechuan. If these mines are not already being worked by officials, gentry, or merchants, and if they are not injurious to the place, land is to be at once bought; such land is only to be enough for the shafts and the necessary buildings. If the lands belong to the people, the lease or purchase shall be made by the Hua Yi Company by arrangement with the owners for a reasonable price. It can also be taken as a subscription of capital and a proportionate value of shares granted to the owner. If it be public property, such as a monastery, temple, etc., the owners have the option of leasing it, renting it, or subscribing it as capital. The Hui Tung Company must wait till land is properly purchased before starting work, and no compulsory purchase or seizure of the land will be allowed.

(5) After each mining property is bought by the Hua Yi Company it is to be handed over to the Hui Tung Company for working. From the mines worked by the Hui Tung Company, such as coal, iron, petroleum, etc., the Hua Yi Company is allowed to collect rent at the rate of 5 per cent on the value of the output, no matter whether such mines make money or not. To reckon the producing capacity and the prices of products, whether dear or cheap, the rent is to be paid on the real price at which the Hui Tung Company sells the products. The value must not be underestimated and any undue advantage gained. With regard to gold sand obtained from gold mines, a rent of 5 per cent will be charged on the pure gold obtained after the gold sand has been thoroughly washed, but not on the sand before it has been washed.

(6) Of the mines worked by the Hui Tung Company, such as coal, iron, petroleum, etc., there shall be paid to the Chinese Government as producer's tax 5 per cent on the value of the output of the mines. Export duty shall be paid according to the existing rules now in force. The Szechuan mining bureau shall authorize the Hua Yi Company to collect the producer's tax and to compare the same with the rent, and thus there will be no difference or shortage. No officer shall be deputed for this purpose, so as to save unnecessary expense. The export duty is to be collected by the custom-house, and after the export duty is paid no inland likin dues will be required. As regards the taxes to be charged on precious metals of all kinds, they are to be decided by the board of revenue.

(7) The Hui Tung Company is to send engineers to find out all the mines that are to be opened and to consult with the Hua Yi Company, which submits the same for the approval of the mining bureau. Should a mine be found in a Government hill the opening of which will not be injurious to the place, permission will be granted to open it. The ordinary land tax on such land would, however, be too small a sum for the company to pay the Government for its use. In the case of Government land, therefore, the 5 per cent rent and the 5 per cent producer's tax are to be collected at the same time and both paid to the Chinese Government, but 10 per cent of the rent is to be reserved to pay the expenses of the mining bureau and the Hua Yi Company. The Hui Tung Company is to pay the export duty.

(8) The area of Szechuan is very extensive, and all sorts of mines exist. Chinese who work on their own property are only required to obtain the necessary permission, pay the necessary taxes according to the rules in force, and they are in no way restrained. But if foreign merchants undertake to work the mines, their operations must be limited in some way or other. They must confine themselves to certain intendancies, prefectures, or districts, and not take the whole province as their sphere of work. Now, work must be started in the interior first and at the boundaries afterwards. The Hui Tung Company shall then send engineers to find out first where are mines to be opened and what mines they are; if the same be in districts apportioned to savages, the Hui Tung Company must wait till they find

out whether the advantage will be greater than the injury and devise other means to open them. The Hui Tung Company in such event can not compel the Hua Yi Company to buy the land quickly and hand it over for working. Any possible cause of disturbance must be avoided.

(9) When prospecting for mines, if any boring or sinking of shafts be necessary to examine mineral deposits, an arrangement should first be made by the Hua Yi Company with the landowner for the Hui Tung Company to compensate him according to market prices for any crops, etc., injured. After the mines are opened, should there be any damage to life or buildings caused by land slips or subsidence in the mines, the Hui Tung Company shall make charitable compensation. If after mines are opened cemeteries or mortuary shrines are met with, some plan must be devised to avoid them if the owners do not like to remove them for money given; no excavation will be allowed. In excavating, as long as the galleries dug below the ground are not injurious to the soil above, rascals are not to be allowed to obstruct the work, on the ground that it is injurious to "Fêng Shui." Local authorities must be applied to for protection. The Hui Tung Company is not, however, allowed to claim compensation on these grounds in case it can not succeed.

(10) Whenever it may be necessary to make roads, build bridges, open or deepen rivers, erect sheds, make tools, or other necessaries for mining purposes, and land is required for such purposes, the Hua Yi Company is to buy the land and the Hui Tung Company to pay for it. If water power is required for machinery and enormous work is done on it, no other person is allowed to make use of it. If branch railways have to be constructed in order to connect the mines with the usual trade routes, a thorough survey must be made of the proposed lines and maps drawn with explanations attached. These must be submitted to the mining bureau, which will forward them to the Szechuan viceroy and head office at Pekin for record and sanction. Nothing of the kind should be undertaken without such sanction. If telegraphs and telephones are wanted for connecting the various mines, the same are to be submitted to the mining bureau for approval.

(11) The Hua Yi Company is to deal with all matters of negotiation, and the collection of rent and taxes; the Hui Tung Company to superintend and work all mines. Each has its own sphere of work, but each company may inquire into the other's affairs. A Chinese manager and a foreign manager should be appointed for each mining work, whose salaries shall be paid by the Hui Tung Company. The majority of the overseers should be Chinese and all the miners natives of the province. All are to receive adequate wages, and further rules must be made on this subject by the Hua Yi and Hui Tung companies. Later on, the mining bureau should instruct the company to select for important positions any Chinese who may have become proficient in mining engineering. They are to be treated the same as foreigners, to encourage improvement.

(12) On opening the mines the Hui Tung Company shall establish a school of mining and railway engineering in some locality convenient to the mines, and there shall be selected twenty or thirty promising youths by the local officials and gentry to study in this school under foreign instructors, and be thus prepared for future employment on railways and in mines.

(13) At places where mines are opened, the mining bureau should apply to the local authorities for protection. Such mines should also obey their rules and enroll volunteers to guard against thieves, etc. If the natives should enroll themselves of their own accord as volunteers to protect the localities, the Hui Tung Company should also subscribe towards their expenses.

(14) The mining bureau, acting as intermediary between the superiors and subordinates, is to attend to all negotiations between natives and foreigners and matters

of protection. The work involved, as well as the expenses, will be great. The Hui Tung Company should therefore start work within three months after the signing of this agreement, and pay the mining bureau the sum of 100 taels per month for its working expenses for each mine, reckoning from the day when work is started. There will be no other charges besides this. If work be not started after six months, this agreement is considered canceled, and the Hua Yi Company will be at liberty to invite other merchants to take up the work. It will be no concern of the Hui Tung Company.

(15) The Hui Tung Company shall work all the mines according to the existing rules adopted by the head office. After paying the producer's tax and the export duty, if there should be a profit by the annual accounts, there shall first be paid 6 per cent interest on the capital employed, next 10 per cent of the remainder of the profit shall be set aside as a sinking fund for the yearly repayment of capital and consequent reduction of interest, payments to sinking fund ceasing when the invested capital is wholly repaid, and from the remaining net profit, 25 per cent shall be paid to the Chinese Government and the remainder shall go to the Hui Tung Company for its own disposition.

(16) The Hui Tung Company is to open not one mine, but a large number. The accounts and profits of each mine must be kept distinct from the others; the gains of one mine should not be made to offset the losses of another and so cause the Government income to suffer reduction.

(17) At the end of every year, the Hui Tung Company shall make up distinct accounts of the different mines, whether profitable or not, and the same must be audited by the foreign and Chinese managers, and, when found correct, a printed account of profit and loss shall be rendered by each mine to the mining bureau for approval. A general account of profit and loss for all the mines shall then be prepared and submitted to the head office at Pekin, the board of revenue, and the viceroy of Szechuan for audit. Payments due to the Government shall be remitted at the same time. The report shall show the real amount of money due to the Government, in order to avoid all discrepancies in the accounts. The Chinese Government and the Hua Yi Company are not to be held responsible in case of loss.

(18) The Hui Tung Company is to have control of all the mines opened by them for a period of fifty years, reckoning from the date on which each mine is opened, on expiration of which term all the mines, whether profitable or not, shall, with all plant, machinery, materials, buildings, roads, and all property acquired by the capital of the mines, be handed over gratis to the Chinese Government without asking for compensation, and in due time the mining bureau of Szechuan shall report to the head office at Pekin, and the viceroy of Szechuan shall send deputies to take delivery of the same. The land rented by the Hua Yi Company shall be handed back to the original owners.

(19) The Hui Tung Company, being formed of Chinese and foreign shares, shall at its own choice sell and buy its shares according to the fluctuation of the market rates. If the Hua Yi Company or any Chinese gentry or merchants shall within the said term of fifty years acquire three-fourths of all the shares in the Hui Tung Company, the mines may then be taken over from the Hui Tung Company, and the mining bureau shall report upon the same and direct the said shareholders (merchants) to take charge of the mines.

(20) Should any mines opened on land bought by the Hua Yi Company and handed over to the Hui Tung Company be stopped, on account of no profits being made, and the rent cease to be paid, then the Hua Yi Company has the option of adopting other means to open such mines or use the land for any other business. This, of course, is to prevent the money spent on the land from being wasted and consequently has nothing to do with the Hui Tung Company.

(21) If the Hui Tung Company sends out engineers who discover mines in certain places and report the same to be rich, but can not guarantee the same, and it is exceedingly difficult to purchase the necessary land for working such mines, the Hui Tung Company should in such cases pay the purchase money for the land to the Hua Yi Company, who shall have the said land purchased and handed over for working. This will prevent the purchase money being wasted. If a mine is discovered in the land purchased, the price paid for the land will be repaid to the Hui Tung Company by deducting the rent of 5 per cent until the whole purchase money is paid off, when the Hua Yi Company shall again collect the rent of 5 per cent as usual. Should there be no mine in the land purchased, no rent shall be payable to the Hua Yi Company; and the Hui Tung Company, being unable to recover the purchase money, shall not deduct the same with interest from any other mine. This is agreed to by both parties, and a further guaranty will be given at the time.

(22) All machinery, materials, and supplies needed for the mines opened by the Hui Tung Company shall on importation be subject to the rules in force for the Kaiping and other mining companies, and pay one full duty and one-half duty to the maritime customs, and shall be exempt from all inland likin dues.

(23) These mines being under the sovereignty of China, should China ever be at war with another country, the said company shall obey the orders of the Chinese Government and grant no aid to the enemy.

(24) The Hua Yi Company and the Hui Tung Company shall obey all rules and regulations adopted and memorialized by the head office, even if the same be not stipulated in this agreement.

(25) This agreement, with regulations agreed upon, shall be made out both in Chinese and English in eight copies, to be signed by Director Li Tai Ching, of the Hua Yi Company, and Foreign Assistant Director Morgan and Chinese Assistant Director Liu Hsio Shun, of the Hui Tung Company, and to be sealed by the seal of the mining bureau of Szechuan. One copy each of this agreement is to be sent to the mining and railway board at Pekin, the Tsungli Yamên, board of revenue, the viceroy of Szechuan, and the treasurer of Szechuan for reference. Of the remaining three copies, the Szechuan mining bureau, the Hua Yi Company, and the Hui Tung Company are to keep one each as proof. If there be any mistakes in the translation, the Chinese text shall hold good.

UNITED STATES TRADE IN CHINA.

In CONSULAR REPORTS No. 215 (August, 1898), page 575, will be found my review of the annual report on the trade of China for the calendar year 1897 by Mr. Taylor, statistical secretary of customs.

I now submit a review of his report for the calendar year 1898, with the object of emphasizing the importance of American interests in this vast Empire.

Mr. Taylor says:

GENERAL.

Were any proof needed of the vitality of China's foreign trade, the figures for 1898 would supply it. Various parts of the country were disturbed by sporadic rebellions of sufficient gravity to check business; the Yellow River once more burst

its banks and flooded enormous tracts; an ominous war cloud during the greater part of the year made importers cautious; the political situation was full of menace; and in September, the news from Pekin completely disorganized the trade of the northern ports. In spite of these adverse circumstances, the value of the import trade surpassed all previous records, while the value of the export trade exceeded that of every past year with the exception of 1897. The total volume of the trade was valued at 368,616,483 haikwan taels ($255,819,839),* which is the highest on record. It is gratifying to know that on the whole the trade yielded satisfactory results to those interested.

FOREIGN TRADE.

So much foreign capital has been lately invested in China that the condition of the external trade of the country, as an index to the national resources, is watched with a certain anxiety. In every year from 1886 to 1898, the value of the imports has exceeded that of the exports. For the whole period, the imports have amounted to 1,921,769,180 haikwan taels, the exports to 1,484,741,501 haikwan taels, or an excess of imports over exports of 437,027,679 haikwan taels, making an annual average of about 34,000,000 haikwan taels. These figures have given rise in some quarters to the strange belief that China is being gradually denuded of silver to pay for the balance, and it has even been gravely stated that the country is approaching bankruptcy. It is pointed out that China has not only to pay for her imports, but has also to find funds to meet remittances abroad for the service of loans, for the purchase of war material, and for the support of legations, etc. The depressing picture thus presented to the imagination has a tendency to destroy credit and prevents many people from investing in Chinese securities; and it may be well to show that, as far as can be ascertained, the position is one that need cause no anxiety. It must be remembered that the figures which come under the cognizance of the customs do not represent the whole of China's foreign trade. There is a junk traffic to Korea and to the south of which we have no statistics, but which is certainly profitable; and there is considerable trade with Mongolia and Thibet. It is estimated, for instance, that 20,000,000 pounds of tea are sent annually into Thibet. The large income derived from the expenditure of foreign vessels, both mercantile and national, for provisions and other necessaries must not be forgotten; and the sums which are remitted or brought back by emigrants probably reach a total which would be surprising were figures available, and which would alone be sufficient to cover all outgoings for the service of loans. It has been stated, apparently upon good authority, that from California alone the remittances amount to $10,000,000 or $12,000,000 gold annually. The expenditure of foreign legations and consulates, the money spent by travelers, who arrive in increasing numbers, and the preliminary disbursements of syndicates are all sources of income which must be taken into account. In the absence of definite information, the above considerations can only be put forward as presumptive evidence that the nation is well able to pay its way; but the proof is to be found in the fact that the Government remittances to Europe for the service of loans, amounting during 1898, at average rates of exchange, to nearly 18,000,000 haikwan taels ($12,492,000), are made through foreign banks by the medium of bills of exchange against exports. So far from silver being exported abroad, there was a net import during the year of 4,722,025 haikwan taels. Moreover, notwithstanding occasional tightness at the treaty ports, information received from all parts of the country points to no scarcity of silver, and the general course of silver prices indi-

*Taking the average value of the haikwan tael in 1898, as estimated by the United States Director of the Mint, as 69.4 cents.

cates that the metal is plentiful. It may be confidently asserted that China meets the whole of her obligations without any depletion of her currency, and that the Chinese buy no imports except such as can be obtained in exchange for exports. No doubt, the Government is hard pressed for funds, but the country grows wealthier every year.

A real difficulty the Government has to face is the scarcity of copper cash—a difficulty which is likely to increase, as the intrinsic value of the cash as metal is actually greater than that of the silver for which they at present exchange. The copper money purchasable for a tael of silver costs the Government for metal (copper and zinc) not less than 1.354 taels, which does not include the cost of minting. This condition has not only restricted coinage, but has resulted in a serious disappearance of the coins, due to melting down for the sake of the copper, and a further fall is to be feared. The obvious remedy is an extended minting of subsidiary silver coins, and this process is gradually but very slowly taking place. As soon as the various syndicates get to work, China may be expected to absorb every year an increasing quantity of the white metal.

The development of industrial enterprises, the extension of railways, and the exploitation of the mineral resources of the country are likely to have important effects upon trade in the near future. As regards the first, in spite of some disappointments, which admit of explanation and are temporary, steady progress is observable, and everything points to a prosperous future which will further develop the foreign trade. No doubt certain imports will soon feel the native competition, but other goods will take their place in exchange for the exports now devoted to procuring those articles. If the Chinese can obtain their cotton yarn and matches more cheaply by making them, they will have something saved to spend on other goods. Industry leads to wealth, and wealth brings demand for goods. And it is surprising that the prophecy should sometimes be heard that the Chinese will import less as they manufacture more. Experience teaches that the direct contrary is invariably the case.

Imports.—The net value of the import trade was 209,579,334 haikwan taels ($145,448,058), exceeding that of all previous years and being 6,750,709 haikwan taels above the value for 1897. If we deduct from the figures for 1886 the value of the imports into the Formosan ports (no longer included in our returns), which amounted to 2,310,321 haikwan taels, we find that the import trade, then estimated at 85,169,002 haikwan taels, has increased over 145 per cent,* or, in other words, is nearly two and a half times the value of what it was twelve years ago. It is evident that a country which can increase its purchases at such a rate is finding trade advantageous. It may be interesting to note that morphia, which in the form of subcutaneous injections is being more and more used as a cheap substitute for opium, is imported in annually increasing quantities. In 1894, an import of 48,324 ounces was recorded, and by 1898 the import had steadily increased to 92,159 ounces. This trade is not one to be encouraged, either from a revenue or any other point of view.

The value of the trade in cotton piece goods has remained practically stationary for three years, having been 79,243,431 haikwan taels ($64,266,423)† in 1896, 78,663,280 haikwan taels ($58,132,164) in 1897, and 77,618,824 haikwan taels ($53,867,464) in 1898. These figures show a slight tendency towards decline, but it

* NOTE BY THE BUREAU OF FOREIGN COMMERCE.—The secretary of the Chinese customs has made no allowance in this estimate for the fall in the value of the tael, viz, from 93.2 cents in 1886 to 69.4 cents in 1898. Reduced to United States equivalents, the imports during the respective years were: In 1886, $79,377,510; in 1898, $145,448,058—which makes the increase 83 per cent, instead of 145 per cent when stated in taels.

† The average value of the haikwan tael in 1896 was 81.1 cents; in 1897, 73.9 cents; and in 1898, as before noted, 69.4 cents.

must be remembered that in 1895 the value was only 53,074,164 haikwan taels ($41,185,551). There are certain movements in the trade which deserve attention. Dutch goods are rapidly losing ground. The importation of Dutch drills in 1896 was 84,334 pieces; in 1897, 25,862 pieces; and in 1898, only 18,318 pieces. Dutch jeans were 54,260 pieces in 1896, 50,890 pieces in 1897, and 38,475 pieces in 1898. Dutch sheetings have disappeared; they can not keep pace in price and quality with those of the United States. The export of cottons from India, which lately showed so great an advance, has been checked by a large home demand. Indian T cloths, which amounted to 289,863 pieces in 1896 and 367,781 pieces in 1897, fell to 83,852 pieces in 1898. Of Indian drills, 39,775 pieces were imported in 1896, 11,243 pieces in 1897, and only 2,078 pieces in 1898. Indian sheetings have declined from 156,709 pieces in 1896 and 23,700 pieces in 1897 to 16,520 pieces in 1898. Japanese T cloths during the same three years advanced as follows: 12,843 pieces, 24,957 pieces, and 103,663 pieces. Japanese sheetings show an immense decline, said to be due to inequality of texture, which handicaps them in competition with American goods. Manchester can no longer compete with the United States in the importation of drills, jeans, and sheetings, owing to the lower prices at which the latter country can land this class of goods in China. In these heavy makes, which use up a large quantity of cotton without demanding such delicate machinery and highly skilled labor as are required for finer goods, such as shirtings, the freight on the raw cotton to England makes an appreciable difference in the cost of production. Freights from New York are lower than from Liverpool. The goods pass through fewer hands in America. Prices are also influenced by the fact that while American manufacturers are using every effort to secure the market here, Manchester has more orders at present than can be immediately executed, and the large demand from India keeps the mills fully occupied. America does not yet compete with Great Britain in finer makes.

White and refined sugar and American flour are all being bought more freely, which, as indicating increased ability to purchase luxuries, may be taken as a sign of prosperity.

Steady strides have been made in the importations of tin plates, which have risen from 31,110 piculs (4,148,000 pounds) in 1896, 58,619 piculs (7,815,866⅔ pounds) in 1897, to 112,081 piculs (14,934,133⅓ pounds) in 1898.

Exports.—The value of the exports was estimated at 159,037,149 haikwan taels ($110,371,781), a slight decline from the previous year, which, it will be remembered, showed an advance of thirty-two millions over 1896. The demand for sterling bills of exchange on Europe, which the banks purchase to remit sums received from the Government for the service of loans, by keeping exchange low, stimulates the export trade, and the consequent expansion enables the nation to pay its debts by means of its products and without exporting silver. But Government obligations are not the main factors in what is a healthy development. A glance at the tables of trade will show how steady the expansion has been, and the encouraging feature is that the increase has taken place in spite of the falling away in the export of tea and silk. The export to foreign countries direct of tea of all kinds has fallen from 2,167,552 piculs (289,006,000 pounds) in 1888 to 1,538,600 piculs (205,146,000 pounds), and the silk trade shows ominous signs of decadence. The decrease in the export of green tea is partly due to the imposition of the new duty in the United States and to the enforcement of a higher standard of purity, which will in the end probably do much to improve the trade. While the exports to Great Britain fell from 244,480 piculs (32,597,000 pounds) to 200,334 piculs (26,711,000 pounds), the exports to Russia rose from 168,759 piculs (22,501,000 pounds) to 213,302 piculs (28,440,000 pounds) sent by sea via Odessa, and from 528,215 piculs (70,428,000 pounds) to 562,572 piculs (75,009,000 pounds) sent overland via Kiakhta. There was a further

development in the change of route for Central Asia via Batum instead of Bombay. The attempts to introduce Indian methods of manufacture have not so far been successful.

The export of silk showed no improvement, but it is said that the season was one of the best on record for the native growers. A good crop was anticipated, but the cocoons turned out badly. The competition amongst foreign buyers and low exchange keep prices up, and there is thus no inducement to growers to check the increasing deterioration of the worms. Steam filatures have not done well during the year.

The expansion of the export trade is of the first importance to all who have dealings with China, whether as importers or exporters, for the people will buy more as they sell more. Increase in imports can only take place pari passu with an increase in exports, and China will only take the one in exchange for the other. Hitherto, judging from articles in the foreign press and from public speeches, this aspect of the question has been somewhat overlooked. While every effort is made to procure facilities for selling, a comparatively languid interest appears to be taken in questions connected with the supply of articles to buy. There must be many things in this country, in addition to those now exported, such as fibers, dyes, tanning barks, spices, gums, etc., which would find a ready market abroad. The establishment in Hongkong and Shanghai of commercial museums, where samples of Chinese products could be collected and exhibited, would no doubt be followed by satisfactory results, and is worth the consideration of the chambers of commerce. Meanwhile, trade in the following articles shows steady growth, as will be seen by comparison with the figures for 1892: Hemp, 61,598 piculs (8,213,000 pounds) in 1892 has risen to 106,845 piculs (14,246,000 pounds); hides, from 62,911 piculs (8,388,000 pounds) to 226,335 piculs (30,168,000 pounds); leather, from 4,819 piculs (642,000 pounds) to 16,917 piculs (2,255,000 pounds); mats, from 17,283,012 pieces to 39,457,799 pieces; matting, from 223,894 rolls to 536,893 rolls; oils (sundry), from 44,062 piculs (5,874,000 pounds) to 320,632 piculs (42,750,000 pounds); tobacco, from 92,127 piculs (12,283,000 pounds) to 371,137 piculs (49,484,000 pounds). The export of feathers is receiving much attention and shows good progress; it is to be regetted that the trade is not confined, as formerly, to the feathers of fowls and ducks, but is under later conditions resulting in the destruction of vast numbers of the most beautiful wild birds in the country. The export of raw cotton fell from 493,139 piculs (65,736,000 pounds) to 273,739 piculs (36,498,000 pounds), which is accounted for by good prices obtained locally.

SHIPPING.

Entries from foreign ports were 6,093 vessels, aggregating 4,927,000 tons, as compared with 5,281 vessels with a total tonnage of 4,799,000 tons in 1897. Coastwise entries were 19,958 vessels, making 12,164,000 tons, as against 16,639 vessels representing 12,035,000 tons in 1897. The total tonnage inwards and outwards was 34,233,000 tons, and of this total Great Britain contributed 62 per cent; China 24 per cent; Germany and Japan, each 5 per cent; Sweden and Norway, 1 per cent; France, 1 per cent; America, 1 per cent; and all other flags together, 1 per cent.

TREASURE.

The recorded movements of gold and silver bullion between China and foreign countries show a net export of gold worth 7,703,843 haikwan taels, and a net import of silver of 4,722,025 haikwan taels. Exchange in China having fallen below the value of silver, it was found profitable to send 3,065,275 haikwan taels to India.

The following table gives the value of the foreign import and the export trade, exclusive of bullion:

Description.	Value.	
Imports.	*Hk. taels.*	
Net imports	209,579,334	$145,448,058
Import duty	5,729,908	3,976,556
Opium duty	5,476,816	3,800,910
Total duty	11,206,724	7,777,466
Imports less duty, etc	198,372,610	137,670,592
Deduct 7 per cent for charges, etc	13,886,082	9,636,941
Value of imports at moment of landing	184,486,528	128,033,651
Exports.		
To foreign countries, market value	159,037,149	110,371,781
Add duty, estimated at	5,405,263	3,751,253
Add 8 per cent on market value for charges	12,722,972	8,829,743
Value of exports at moment of shipment	177,165,384	122,952,777

In his report for 1897, Mr. Taylor said:

The favor which American goods find in the Chinese market is due to their cheapness. Freights from America are lower than from Europe, and the high prices which protection enables American manufacturers to obtain from consumers at home allow them to export the balance of the outturn and lay it down in this country at attractive rates.

In my report mentioned above (CONSULAR REPORTS No. 215), I said, after quoting his report:

Mr. Taylor is a British subject and tries to put a good face on the decline of English goods. The truth is that the excellent qualities of American cottons, and not their cheapness, has won them such enormous sales.

In this year's report he alleges other reasons, viz, that Dutch and Japanese goods are inferior to ours; that India is trying to supply her home demand and Manchester is helping, so these two British markets do not now care for China; that America does not employ skilled labor and delicate machinery; that our cottons take up more raw material than English; yet, that the freight on raw cotton to England "makes an appreciable difference" (one would suppose that if we used more cotton in a yard of piece goods than the English, the freight could not cut much of a figure); that America is using every effort to increase sales, while Manchester has so much to do to supply India that she is making no efforts for China trade.

From the abstract of statistics, I have compiled the following as of interest to the United States:

Value of foreign trade and customs revenue of China.

Year.	Foreign trade.	Customs revenue.
	Hk. taels.	*Hk. taels.*
1885	153,205,729	14,472,760
1897	366,329,983	22,742,104
1898	368,616,483	22,503,397

Value of trade by countries in 1898.

Country.	Imports.		Exports.		Total.	
	Hk. taels.		*Hk. taels.*		*Hk. taels.*	
United States	17,163,312	$11,911,339	11,986,771	$8,318,819	29,150,083	$20,230,158
Great Britain	34,962,474	24,263,957	10,715,952	7,436,871	45,678,426	31,700,828
Continent of Europe, including all the Russias	11,151,880	7,739,405	43,727,321	30,346,760	54,879,201	38,086,165
Japan, excluding Formosa	22,581,812	15,671,778	15,168,148	10,526,692	37,749,960	26,198,472
Hongkong	97,214,017	67,466,528	62,083,512	43,085,958	159,297,529	110,552,485
Formosa	4,794,251	3,328,210	924,649	641,692	5,718,880	3,968,902
India	19,135,546	13,280,069	1,324,125	918,943	20,459,671	14,199,012
All the rest of the world	11,742,055	8,148,986	13,106,690	9,096,043	24,848,745	17,245,029

The average value of the haikwan tael in 1897, as estimated by the United States Director of the Mint, was 73.9 cents; the average for 1896 was 81.1 cents; for 1898, 69.4 cents; thus the haikwan tael was 4.5 cents cheaper in 1898 than in 1897. This fall in value must be borne in mind in the following comparisons.

Value of import trade in calendar years 1897 and 1898.

Country.		1897.	1898.	Decrease.	Increase.
United States	haikwan taels	12,440,302	17,163,312		4,723,010
	dollars	9,193,383	11,911,339		2,717,956
Great Britain	haikwan taels	40,015,587	34,962,474	5,053,113	
	dollars	29,571,519	24,263,957	5,307,562	
Continent of Europe, including all Russia, European and Asiatic	haikwan taels	12,008,256	11,151,880	856,376	
	dollars	8,873,102	7,739,405	1,133,697	
Japan (excluding Formosa)	haikwan taels	17,564,284	22,581,812		5,017,528
	dollars	12,980,006	15,671,778		2,691,772
Hongkong	haikwan taels	90,125,887	97,214,017		7,088,130
	dollars	66,603,030	67,466,528		863,498
India	haikwan taels	20,068,183	19,135,546	932,637	
	dollars	14,830,387	13,280,069	1,550,318	
All the rest of the world	haikwan taels	15,013,493	13,106,690	1,906,803	
	dollars	11,094,972	9,096,043	1,998,929	

The above table shows that of non-Asiatic countries or divisions, the United States stands alone in the column of gains over 1897; it exceeded by over 12,000,000 taels the value of its sales in 1895, while Great Britain has lost quite 10,000,000 taels in value since 1896.

The value of the United States sales exceeded by $4,171,934 the combined sales of all Europe and all the Russias. In my former report (CONSULAR REPORTS No. 218, p. 441) will be found a table in which I show that the value of United States exports to China was greater in 1897 than that of all continental Europe and the Russias, European and Asiatic, by $320,281. In 1898, the figures rose to $4,171,934, as shown above.

Under the heading "All the rest of the world" are included Singapore and Straits, Australia, New Zealand, etc., South Africa, including Mauritius, British America, South America, Macao, Philippine Islands, Cochin China, Tonkin and Anam, Siam, Java and Sumatra, Turkey in Asia, Persia, Egypt, Algiers, Aden, etc., and Korea.

From the values given under Hongkong and India (116,349,556 haikwan taels), there should be deducted opium valued at 29,255,-903 haikwan taels, which would leave a total value for both divisions of 87,093,653 haikwan taels ($60,442,997).

The customs trade returns are not at all explicit and do not show the true condition of affairs, for reasons which I have repeatedly explained in former reports. This method of setting forth trade is now being complained of in the French and German press, and it is to be hoped that the Chinese Government will adopt some system more in consonance with the facts. A good percentage of the trade credited to Great Britain belongs to the United States, as, for instance, all shipments from Atlantic ports to China via England. Our entire trade (possibly excepting a little of the oil) with the ports of China south of Shanghai is carried on through Hongkong. The customs returns state that "the imports from Hongkong come originally from and the exports to that colony are further carried on to Great Britain, America, Australia, India, the Straits, etc.," yet the figures are credited to Great Britain, and it is this fact which gives the statisticians their cue for according to Great Britain her tremendous lead, as they state that she does 65 per cent of the trade. The value of the foreign trade of China in 1898 was:

Description.	Value.	
	Hk. taels.	
Total	368,616,483	$255,819,839
With Hongkong	159,297,529	110,552,485
Leaving for the rest of the world	209,318,954	145,267,354
Total value of net imports	209,579,334	145,448,058
Hongkong sent	97,214,017	67,466,528
Leaving for the rest of the world	112,365,317	77,981,530

The total net value of foreign imports was 209,579,334 haikwan taels ($145,448,058). The value of known Asiatic imports was 71,639,128 haikwan taels ($49,717,555), as follows:

Articles.	Value.	
	Hk. taels.	
Opium (mostly Indian)	29,255,903	$20,303,597
Japanese:		
T cloths	198,467	137,736
Drills	2,632	1,826
Sheetings	15,210	10,556
Handkerchiefs	7,967	5,529
Towels	78,975	54,809
Cotton—		
Flannel	79,301	55,035
Cloth	103,716	71,979
Crape	36,270	25,171
Yarn	10,383,716	7,206,299
Betel nuts	217,338	150,828
Bêche de mer	987,275	685,169
Birds' nests	521,517	361,933
Charcoal	71,988	59,960
Fans, palmleaf	256,409	177,948
Fish and fishing products	3,161,900	2,194,359
Jade stone	193,301	134,151
Mangrove bark	107,264	74,441
Matches, Japanese	2,376,157	1,649,053
Mats, straw and rush	488,347	338,913
Mushrooms	435,287	302,089
Rattans	504,223	349,931
Rice	10,448,838	7,251,494
Sandalwood	1,034,796	718,148
Sapan wood	131,799	91,469
Seaweed and agar-agar	1,084,334	752,528
Sugar, various	9,040,039	6,273,787
Tea, Japanese	21,072	14,624
Umbrellas	197,167	136,834
Total	71,639,128	49,717,555

This leaves 137,940,206 haikwan taels ($95,730,503) for non-Asiatic imports. The value of imports from the United States as given in returns was 17,163,312 haikwan taels ($11,911,339). The following shows the value of imports classified as American:

Articles.	Value.	
	Hk. taels.	
Drills	3,625,229	$2,515,909
Jeans	211,796	146,986
Sheetings	6,219,315	4,316,205
Flour	1,774,712	1,231,650
Oil, kerosene	6,797,922	4,717,978
Total	18,628,974	12,928,798

Thus, the five classes noted as American exceed in value by 1,465,662 haikwan taels ($1,017,169) the totals given as imports from the United States, and, as we sell an ever-increasing quantity of lumber, machinery, household stores, lamps, clocks, iron, etc., it is to be regretted that we can not know just what our trade is worth. However, in 1895, Great Britain sold five times what we did, while in 1898 she sold only twice as much. Moreover, it is noticeable that all those powers who have taken territory in China during the past year have suffered severe losses in trade, while Japan and the United States have gained.

The following shows the trade balance with the United States for four years:

Year.	Imports.	Exports.	Excess imports.	Excess exports.
	Hk. taels.	*Hk. taels.*	*Hk. taels.*	*Hk. taels.*
1895	5,093,182	15,383,402	.....	10,290,220
1896	11,929,853	11,123,599	806,254	.....
1897	12,440,502	17,828,406	.....	5,384,104
1898	17,163,312	11,986,771	5,176,541	.....

Thus, even taking the customs returns as correct, we have a balance of over 5,000,000 taels in our favor.

Imports of all merchandise which expressly names the country of its origin for the twelve months ended December 31, 1897, and for the same period of 1898.

Description.	1897.	1898.	Decrease.	Increase.
Shirtings (Japanese)....pieces...	2,266	5,732	.....	3,466
T cloths:				
Japanese....do.....	24,957	103,663	.....	78,706
Indian ....do.....	367,781	83,852	284,129	.....
Drills:				
English ....do.....	76,202	73,356	2,846	.....
Indian ....do.....	11,243	2,078	9,165	.....
Dutch ....do.....	25,862	18,318	7,544	.....
American ....do.....	1,531,647	1,314,761	216,886	.....
Japanese....do.....	1,250	1,065	185	.....
Jeans:				
English ....do.....	183,451	123,599	59,852	.....
Dutch ....do.....	50,890	38,475	12,415	.....
American ....do.....	68,076	105,759	.....	37,683
Sheetings:				
English ....do.....	389,569	523,366	.....	133,797
Indian....do.....	23,700	16,520	7,180	.....
American ....do.....	2,418,971	2,483,991	.....	65,020
Japanese....do.....	24,744	6,601	18,143	.....
Handkerchiefs....dozen...	23,071	17,745	5,326	.....
Towels....do.....	141,728	191,945	.....	50,217
Cotton flannel (Japanese)....pieces...	60,532	56,835	3,697	.....
Cotton cloth (Japanese)....do.....	172,731	151,329	21,402	.....
Cotton crape (Japanese)....do.....	50,903	44,462	6,441	.....

Imports of all merchandise which expressly names the country of its origin for the twelve months ended December 31, 1897, and for the same period of 1898—Continued.

Description.	1897.	1898.	Decrease.	Increase.
Cotton yarn:				
English ..... pounds...	6,839,733	9,812,000	.....	2,972,267
Indian..... do.....	164,740,266	186,657,333	.....	21,917,067
Japanese ..... do.....	37,842,266	74,699,200	.....	36,856,934
Camlets:				
English..... pieces...	60,113	46,162	13,951	.....
Dutch ..... do.....	18	76	.....	58
Matches (Japanese)..... gross...	8,974,168	11,073,025	.....	2,098,857
Oil, kerosene:				
American ..... gallons...	48,212,505	50,084,015	.....	1,811,510
Russian ..... do.....	36,924,125	19,926,246	17,007,879	.....
Sumatran ..... do.....	14,212,278	26,871,865	.....	12,659,587
Umbrellas (Japanese) ..... pieces...	848,917	544,691	304,226	.....

The above table shows the wonderful strides that Japan is making. All classes lost in drills, the American loss being the greatest—216,886 pieces. In jeans, the only gain is American; in sheetings, the English made gains twice as large as the American (this hardly agrees with Mr. Taylor's statements quoted above); while American oil gained 1,801,510 gallons, and Russian lost 17,007,879 gallons.

The American oil company has recently had consigned to it two ships from Batum with Russian oil. I am also informed that the Sumatran oil will show losses this year, as the wells are running low.

TRADE IN NORTH CHINA.

At this writing, it is impossible to learn the actual value of our trade in North China, but it can be safely put down as at least two-thirds of the entire value for all China. It is known that 89 per cent of our cottons are taken by Chefoo, Tientsin, and Niuchwang. The total value of imports of American cottons into China was 10,056,340 haikwan taels ($6,989,100); of American oil, 6,797,922 haikwan taels ($4,717,758); of which Niuchwang, Tientsin, and Chefoo took 89 per cent cottons, valued at 8,950,143 haikwan taels ($6,211,399), and at least 20 per cent (estimated) of the oil, 1,359,584 haikwan taels ($943,551), or 10,309,727 haikwan taels ($7,154,950). No account can be taken of the railway material, lumber, flour, household stores, etc.; but these figures show that North China is of vast importance to us as a market.

AMERICAN COTTONS IN SHANGHAI.

I am indebted to Mr. J. F. Seaman, an American merchant in Shanghai, for the following interesting table compiled by him, showing the movements of our cottons.

Comparative table of imports and reexports at Shanghai of American cotton goods.

Description.	1898.	1897.	1896.
Total import at Shanghai.	*Pieces.*	*Pieces.*	*Pieces.*
Drills	1,212,046	1,476,746	1,248,287
Sheetings	2,349,865	2,447,808	2,316,912
Jeans	103,600	69,000	55,000
Total	3,665,541	3,993,554	3,620,199
Total reexport from Shanghai.			
Drills	1,519,635	1,312,273	1,014,041
Sheetings	2,995,627	2,261,362	1,618,815
Jeans	109,295	70,295	52,765
Total	4,624,557	3,643,930	2,685,621
Reexports to three northern ports (Tientsin, Niuchwang, and Chefoo).			
Drills	1,182,428	997,523	742,091
Sheetings	2,849,135	2,163,752	1,595,100
Jeans	88,775	50,745	42,690
Total	4,120,338	3,212,020	2,379,881
Proportion of total	89 per ct.	88 per ct.	88½ per ct.
Reexports to four Yangtze ports (Chinkiang, Wuhu, Kiukiang, and Hankau).			
Drills	263,370	250,226	218,845
Sheetings	27,105	10,805	11,635
Jeans	.....	.....	.....
Total	290,475	261,031	230,480
Proportion of total	6¼ per ct.	7⅛ per ct.	8½ per ct.

NOTE.—December 31, 1896, heavy stocks (estimated at 1,339,000 pieces, all kinds) were carried over into 1897; December 31, 1897, heavy stocks (estimated at 1,305,000 pieces, all kinds) were carried over into 1898; December 31, 1898, the stock carried forward was estimated at 306,000 pieces.

I also attach the market report of Messrs. Noël, Murray & Co. of March 11, showing the first shipments to Tientsin for this year, on the opening of that harbor.

First shipments of cottons to Tientsin.

Articles.		1899.	1898.
Sheetings:			
American	bales	15,870	9,980
English	do	846	2,510
Dutch	do	86	100
Indian	do	50	100
Shanghai	do	120	.....
Japanese	do	25	.....
Jeans:			
American	do	510	552
English	do	70	568
Dutch	do	222	235
Shirtings:			
English	do	3,192	5,402
Dutch	do	.....	225
Turkey reds	cases	435	509
Cotton lastings	do	591	1,854
Union Italians	do	205	.....

First shipments of cottons to Tientsin—Continued.

Articles.		1899.	1898.
Drills:			
American	bales...	10,300	4,146
English	do.....	262	1,044
Dutch	do.....	360	480
Indian	do.....	100	.....
Shanghai	do.....	100	.....
T cloths:			
Indian	do.....	362	580
English	do.....	384	282
Japanese	do.....	110	.....
Camlets	do.....	60	36
Long ells	do.....	50	47
Lastings	do.....	152	67
Italian cloth	cases...	179	143
Russian cloth	bales...	20	.....
Handkerchiefs	cases...	35	57
White shirtings	do.....	1,400	2,111
White Irishes	do.....	90	101
Velvets	do.....	46	16
Printed cottons	do.....	1,385	1,251
Embossed shirtings	do.....	272	.....
Spanish stripes:			
Cotton	bales...	183	181
Woolen	trusses...	80	230
Muslins	cases...	52	.....
Yarn:			
English	bales...	405	692
Indian	do.....	4,930	10,880
Japanese	do.....	2,720	2,100
Shanghai	do.....	5,640	1,700
Sundries	pakages...	43	230

This makes a total of 51,842 packages, against 48,688 packages last year, American goods showing an increase of 12,000 bales.

We would specially commend the foregoing to the attention of our friends in the United States who are showing a certain tendency to rush the import trade.

DIRECT TRADE WITH NORTH CHINA.

For many years I have been trying to induce merchants in the ports to take direct shipments of merchandise from the United States, instead of buying in Shanghai, as is now their custom; but there are many obstacles to overcome, and, at first, some little risk. The Chinese merchant, like all others, goes to the largest market to sell as well as to buy, and, aside from the throttling guilds, there is always more or less opposition to be met in inaugurating any new methods. On the other hand, the traders in the ports, if properly supported, should be able to overcome these obstacles. The merchant who has direct consignments ought to save—

(1) The extra expense incident to all cargo shipped to Shanghai, which is landed into cargo boats at Woosung and towed 18 or 20 miles to the city.

(2) Extra insurance on account of item No. 1.

(3) The municipal tax at Shanghai, which is about 2 per cent of the duty.

(4) Godown, transportation, local fire insurance.

(5) Brokers' and auctioneers' commissions.

(6) The cost of freight and coolie hire in transshipping from Shanghai to final port of destination.

The merchandise landed at Chefoo would have none of the above charges to pay.

The markets of Niuchwang, Tientsin, Chefoo, Talienwan, Port Arthur, etc., afford a splendid field for a direct line of ships from the United States. At Chefoo, there is no bar, plenty of water, and every facility for landing and discharging cargo. All the straw braid, wool, hides, pongees, bristles, etc., shipped to Shanghai for the United States come from these northern ports.

I am very anxious that our merchants at home should try to enter into this market directly, and not via Shanghai. I think that in a short time their trade would rapidly increase. As a result of my representations, Messrs. Cornabé Eckford & Co., of this port, have consented to push any lines intrusted to them. The firm of Cornabé Eckford & Co. is one of the oldest and most respected British houses in China. Its business connections in America and England are the best, and I trust that the cotton people will give it their support. It represents 4 large banks, 11 steamship companies (including the Pacific Mail, Northern Pacific and O. and O., Nippon Yusen Kaisha, etc.), 14 insurance companies (including the Equitable, of New York), sugar refineries, etc. It has also an office in Weihaiwei, and expects soon to have one in Port Arthur, in charge of an American. The following letter has been received from this firm:

CHEFOO, *April 15, 1899.*

JOHN FOWLER, Esq.,
Consul for the United States of America, Chefoo.

DEAR SIR: Referring to the various conversations between our Mr. Anderson and yourself with regard to the development of the direct importation of American cotton goods into this port, we shall feel much obliged if you will put us in communication with the principal manufacturers of these goods, with a view to obtaining consignments from them. You will understand that such consignments are not likely to result profitably in the beginning, inasmuch as the dealers here at the present time draw their supplies from Shanghai, where they have such financial facilities afforded them as make them unwilling to purchase from importers at this port. To induce them to effect their purchases here, it would be necessary to offer them goods at considerably lower prices than they could buy them on the Shanghai market, and this we should not be prepared to do for our own account. In order to minimize the loss to the consignors, which would appear to be inevitable at the outset, we would be willing to make our charges for selling, etc., as low as possible, and shall have pleasure in furnishing you with "pro-forma account sales," should you desire us to do so.

The articles which are in most demand here are, as you are doubtless aware,

sheetings and drills, and consignments of these should be made up in the following proportions, viz: To arrive during the months of January, February, and March, 80 per cent of sheetings and 20 per cent of drills; to arrive during the months of April and May, 100 per cent of sheetings; to arrive during the months of June, July, August, and September, 70 per cent of sheetings and 30 per cent of drills; to arrive during the months of October, November, and December, 100 per cent of sheetings.

We are, etc., CORNABÉ ECKFORD & Co.

IMPORTS BY TREATY PORTS.

In the total value of trade for each port, the following show a decrease from 1897: Chungking, Ichang, Shahsi, Shanghai, Ningpo, Canton, and Pakhoi.

Net value of foreign imports by ports.

Port.	1896.	1898.	Decrease.	Increase.
	Hk. taels.	*Hk. taels.*	*Hk. taels.*	*Hk. taels.*
Niuchwang	8,112,912	10,577,471	.....	2,469,559
Tientsin	29,490,949	32,579,514	.....	3,068,565
Chefoo	9,780,651	14,542,823	.....	4,762,172
Chungking	6,928,954	7,966,682	.....	1,037,728
Ichang	899,558	490,282	409,276	.....
Shahsi *	3,338	23,797	.....	20,459
Hankau	14,193,537	16,019,721	.....	1,826,184
Kiukiang	5,835,876	6,852,785	.....	1,016,909
Wuhu	4,255,747	3,913,420	342,327	.....
Chinkiang	12,637,832	12,626,854	10,978	.....
Shanghai	42,466,210	29,426,510	13,039,700	.....
Soochow *	2,373	644,837	.....	642,464
Ningpo	9,016,551	8,217,007	799,544	.....
Hangchow *	92,217	2,084,875	.....	1,992,658
Wenchow	629,915	727,894	.....	97,979
Fuchau	5,210,273	5,816,862	.....	606,589
Amoy	7,074,854	7,694,633	.....	619,779
Swatow	8,858,938	12,783,657	.....	3,924,719
Canton	12,199,086	11,955,053	203,133	.....
Wuchow *	.....	2,824,486	.....	2,824,486
Samshui *	.....	1,238,939	.....	1,238,939
Kongmoon *	.....	1,066,325	.....	1,066,325
Kiungchau	1,467,656	1,991,563	.....	523,907
Pakhoi	3,145,492	2,368,320	777,172	.....
Total	182,302,919	194,475,208	.....	.....

* Recently opened to trade.

This table is interesting, as it shows that the port of Chefoo led in increased foreign trade, the gain being greater in value than that of all the river ports combined; it further shows that Tientsin has taken the supremacy away from Shanghai for the first time; that the net gain for all China was 12,172,289 haikwan taels, and nearly all of it, or 10,360,296 haikwan taels, is due to the three northern ports.

Relative positions of the ports as to value of foreign imports.

1896.	1898.
1. Shanghai.	1. Tientsin.
2. Tientsin.	2. Shanghai.
3. Hankau.	3. Hankau.
4. Chinkiang.	4. Chefoo.
5. Canton.	5. Swatow.
6. Chefoo.	6. Chinkiang.
7. Ningpo.	7. Canton.
8. Swatow.	8. Niuchwang.
9. Niuchwang.	9. Ningpo.
10. Amoy.	10. Chungking.
11. Chungking.	11. Amoy.
12. Kiukiang.	12. Kiukiang.
13. Fuchau.	13. Fuchau.
14. Wuhu.	14. Wuhu.
15. Pakhoi.	15. Wuchow.
16. Kiungchow.	16. Hangchow.
17. Ichang.	17. Pakhoi.
18. Wenchow.	18. Kiungchow.
19. Hangchow.	19. Sanshui.
20. Shahsi.	20. Kongmoon.
21. Soochow.	21. Wenchow.
	22. Soochow.
	23. Ichang.
	24. Shahsi.

This shows that the three northern ports went up in the list—Chefoo two places and the others one each; that every river port fell or remained stationary excepting Chinkiang, and every coast port except Swatow lost ground. No doubt, it will surprise many to see that Chefoo buys more foreign merchandise than such ports as Canton, Amoy, Fuchau, etc. This is the more remarkable when it is remembered that Canton is supplied from Hongkong, and even Chinese merchandise transshipped from the coast ports at Hongkong for Canton is put down among foreign imports.

Having shown that nearly all the increase in foreign imports is credited to Chefoo, Tientsin, and Niuchwang, it is noted that of the entire value (net) of foreign imports for 1898—194,475,208 haikwan taels—that for the three northern ports was:

Port.	Value.	
	Hk. taels.	
Niuchwang	10,577,471	$7,340,765
Tientsin	32,579,514	22,610,183
Chefoo	14,542,823	10,092,719
Total	57,699,808	40,043,667

This is almost one-third of the whole trade.

In my report of a year ago, I said:

Of the net increase of foreign trade in China in 1897 over that for 1896, almost all is to be credited to the three northern ports, and over one-third of it to the single port of Chefoo.

The figures above given show that that statement applies with greater force for the year 1898.

Further, vast quantities of merchandise are pouring into Manchuria via Port Arthur, Talienwan, and Niuchwang. At the first two places, of course, there is no Chinese customs service, and while Niuchwang is supposed to be a treaty port of China and has its custom-house, no attention is paid to it by the Russians, who land and load cargo as though Niuchwang belonged to them. At Weihaiwei, some little merchandise is landed; considerable is landed at Tsingtau, at which port the Chinese will soon have their custom-house in working order. A vast quantity of foreign goods comes north in native ships and does not enter at the foreign customs, and the overland and canal traffic into this province from Chinkiang and Shanghai is immense; in fact, it is due to the proximity of the canal that Chinkiang makes the only favorable showing of the river ports.

TRADE BY FLAGS.

The customs method of reckoning trade is to credit to the ship the merchandise she carries; thus, a steamer flying the British flag and carrying, say, nothing but American imports will be credited to the British flag.

The only tables giving percentages of trade, etc., are based upon the share taken by each nationality in the carrying trade with foreign countries and between the treaty ports of China.

Extracts are given to illustrate:

Flag.	Number of ships.	Total values of foreign and coast trade.	
		Hk. taels.	
British	22,609	508,241,936	$352,719,906
German	1,831	52,185,211	36,216,536
Japanese	2,262	30,073,053	20,870,699
French	577	19,307,270	13,399,245
Swedish and Norwegian	498	11,619,821	8,064,156
Russian	118	6,142,666	4,263,010
American	743	4,327,530	3,003,306
Danish	268	2,735,275	1,898,281
Austrian	16	1,070,232	742,741
Korean	8	719,581	499,389
Dutch	18	635,212	440,837
Nontreaty powers	23	408,097	283,219
Italian	.....	8,325	5,778
Spanish	2	2,061	1,430
Portuguese	141	561	389
Chinese	23,547	334,422,970	232,089,541

Of the opium taxes—3,983,182 haikwan taels ($2,764,328)—the British flag is credited with 2,454,964 haikwan taels ($1,703,745); all others (America excluded), 1,528,218 haikwan taels ($1,060,583).

A few other percentages are quoted from the same source:

Flag.	Foreign trade.	Coast trade.	Duties on cargoes.	Opium likin.	Total dues and duties.	Number of firms.	Number of residents.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*		
British	53.58	51.44	55.82	61.63	56.54	398	5,148
American	0.94	0.12	0.59	.....	0.87	43	2,056
German	10.5	1.98	7.87	15.96	9.15	107	1,043
French	4.97	0.01	2.3	3.2	2.49	37	920
Dutch	0.16	.....	0.08	.....	0.08	8	87
Danish	0.66	0.03	0.5	0.56	0 5	3	162
Spanish	.....	.....	.....	.....	0.01	4	395
Swedish and Norwegian	1.88	0.74	1.38	0.07	1.16	.....	200
Russian	1.57	0.01	2	.....	1.63	16	165
Austrian	0.28	.....	0.22	0.06	0.22	5	92
Belgian	.....	.....	.....	.....	0.07	9	169
Italian	.....	0.01	.....	.....	0 05	9	142
Japanese	6.7	0.71	4.03	0.54	3.35	114	1,694
Portuguese	.....	.....	.....	.....	0.02	20	1,082
Korean	0.19	.....	0.19	.....	0.15	.....	40
Nontreaty powers	0.11	.....	0.08	.....	0.08	.....	27
Chinese	18.46	44.93	24.91	17.08	23.63	.....	.....
Total	100	100	100	100	100	773	13,421

Not a very good showing for Americans, who sold more than all Europe, and who have the second largest number of residents and third largest number of firms in China.

It is these tables that do us so much injustice; were the country of origin of merchandise given, we would not have such a poor percentage.

This is also the table upon which foreign powers base their claims for their large interests in China, which must be protected by spheres of influence.

CHINESE TRADE WITH THE UNITED STATES.

The net value of foreign imports having increased by 12,172,289 haikwan taels over that of 1896, it is gratifying to learn that the customs reports show that the imports from the United States increased from 11,929,853 haikwan taels in 1896 to 17,163,312 haikwan taels in 1898, or a gain of 5,233,459 haikwan taels, leaving less than 7,000,000 taels of the total increase for all the rest of the world; and, as our trade is underestimated by one-third, there can be little doubt that at least 60 per cent of the increased trade of China is due to the purchases from the United States.

The exports to the United States in 1897 were valued at 17,828,406 haikwan taels; in 1898, at 11,986,771 haikwan taels; a decrease,

as compared with 1897, of 5,841,635 haikwan taels, while our imports increased by 5,384,104 haikwan taels. No other country made nearly so large a decrease in its purchases from China.

In a communication from the Tsungli Yamên to the British minister, in reply to his demand that the foreign customs should always be in charge of an Englishman, it is stated that the English merchants paid 80 per cent of the duties; others have stated that 65 per cent of the trade is British. I think if the returns of trade were kept as ours are, it would be seen that the British trade does not now hold such a lead; moreover, nearly one-seventh in value of the entire foreign imports is in opium, in which no American or American ship can have (by treaty) the slightest dealings. I have more than once pointed out how that treaty handicaps us; nay, has driven us out of the shipping business in China. It has done us incalculable harm and China no good.

JOHN FOWLER,
Consul.

CHEFOO, *April 22, 1899.*

PLUMBAGO IN JAPAN AND CHINA.*

JAPAN.

In reply to Department's instruction of March 15, 1899, I have to report that I am informed by a geologist in the employ of the Japanese Government that deposits of graphite exist in the following localities in Japan:

Sakashita village, Yukigori, Hida Province, Gifu Ken.
Kawaai village, Yukigori, Hida Province, Gifu Ken.
Yamada village, Nebigori, Etchin Province, Toyawa Ken.
Hosoiri village, Nebigori, Etchin Province, Toyawa Ken.
Nishitani village, Ermmagori, Ishikawa Ken.
Kasagi village, Sorakugori, Kyoto Fu.
Atsunishi village, Asagori, Yamaguchi Ken.
Kandama village, Toyouragori, Yamaguchi Ken.
Nishikaseda village, Kawabegori, Kagoshima Ken.
Kamikotau village, Setanaigori, Shiribeshi Province, Hokkaido.

The amount produced appears to be small, and Osaka is its principal market. The productive capacity of the mines is not known.

I suggest that parties interested in the matter might obtain further details of commercial value by correspondence with either the American Trading Company or the China and Japan Trading Company at Kobé.

JOHN F. GOWEY,
Consul-General.

YOKOHAMA, *April 16, 1899.*

* These reports are in answer to an instruction sent at the request of a Northern firm, to which Advance Sheets have been forwarded.

CHINA.

About a year ago, a Chinese brought here samples of plumbago which he said came from near Canton. He declined to give the precise location unless he was paid in advance, and could find no one to do business on those terms.

Recently, a few barrels of plumbago have been brought here from some point in the Yangtze Valley. Messrs. Fearon Daniel & Co. have sent these samples to their New York house to be submitted to experts. I have given them the name of the firm desiring the information, and I have no doubt that they will send samples to that firm.

There are no mines of this material being worked at present.

JOHN GOODNOW,
Consul-General.

SHANGHAI, *April 28, 1899.*

PETROLEUM IN BORNEO.

Boring has taken place in various places in Borneo with such brilliant results that people are beginning to think that this is one of the richest petroleum fields in the world and has a great future. In the north, in the British North Borneo Company's territory, the Bombay-Burma Trading Company has had such a good yield that it has begun to build a refinery.

On the island of Labuan, the same company is engaged in boring and has taken over the "Korszki" concession. Boring is also being successfully carried on in Brunei and Sarawak.

Of the prospects in the western part of Borneo, no one seems to know much. The southern and eastern parts have excellent indications, especially Koetei, Passir, Balangan, Tandjong, and Kaluwar. In Koetei, three different companies are working—the London firm of Sam Samuel & Co., the Koetei Exploration Company, and the Dordtsche Maatschappij.

The firm of Sam Samuel & Co. is starting with a capital of $4,800,000, and can increase it at any time, as the members of the syndicate comprise prominent bankers of Holland and England. It must be remembered that the firm of Sam Samuel & Co. and the well-known Shell Line Company, with which the Moeara Enim Company recently closed a contract, are the same. (See my report on petroleum of March 9, 1899.)*

*CONSULAR REPORTS No. 226 (July, 1899), p. 406.

The firm of Sam Samuel & Co. has taken direction of the enterprise. Its headquarters are at Moeara Djawa, on one of the delta branches of the Mahakam River. Only Americans and Englishmen are employed. Up to the present time, eight spouting wells have been bored. According to the latest news, the syndicate bored a fine new well last month; it took fire, but was extinguished. At Sanga-Sanga, a petroleum tank has been constructed to store the surplus oil.

At Balik Papan, a refinery is being built, and the oil will be carried by pipe line from Sanga-Sanga to the harbor of Balik Papan. The deepest draft ships can enter this harbor and lie right up against the wharf.

In about six months it is hoped that the construction will be finished, so that the exportation of oil can be begun.

There is a narrow-gauge railroad from Moeara Djawa to Sanga-Sanga. The syndicate also has three steam launches for use on the Mahakam River. For this railroad and the launches, the only coal that is used is from the company's territory in Borneo.

In a recent interview, Sir Marcus Samuel says:

> The refinery we are erecting in Koetei will be the largest in the world, and we hope to have it completed within a few months. It will be capable of dealing with 3,000 tons of oil per day, which would enable the Shell Company to supply the East through their own production with oil for illuminating purposes, and I see no reason why they should not. Geographically, their position is favorable; and the refinery and wells are situated only 100 yards from the seashore, where we have 30 feet of water. The wells are close to the refinery, which is, of course, a great advantage, and thus we are able to sell very cheaply.

On March 15, 1899, Sir Marcus Samuel, in a lecture before the Society of Arts, after describing the work of the Shell Company in the East, especially in Borneo, said:

> It was intended, when the exploration of the fields was undertaken, to explore for oil which, had it proved of a similar description to that found in Sumatra, would have been specially adapted for illuminating purposes, and I must therefore frankly state that the discovery of liquid fuel in the enormous quantities in which it has been found in these fields was the result rather of chance than of skill. The very first well bored yielded a supply of oil of a character which showed that with very little treating it was an ideal fuel.
>
> It is quite clear in countries where liquid fuel can be put down, as it can unquestionably now from Borneo to all ports east of the Suez Canal, at prices which will enable it to successfully compete with coal, its use is quite certain, and that in the immediate future. The company has undertaken the control of the vast fields of the Moeara Enim Company, who have, I believe, a property quite as rich as that being worked by the Shell Company, and that property, it is well known, was practically acquired by the Standard Oil Company; but the Dutch Government interfered, and it is now being controlled, and will be managed, by the Shell Company, to whom, I am happy to say, the Dutch Government's prejudices do not extend.

The second enterprise, that of the Koetei Exploration Company, is on the island of Miang, opposite the coast of Koetei. This territory is equally rich in oil. The company's own steamer will shortly come from Singapore, with the object of maintaining a regular service between the island and Samarinda. The capital of the Koetei Exploration Company is $120,000.

Near the firm of Sam Samuel & Co., which is working with so much success, a Mr. Stoop has been boring, I believe, for the last two years; but, so far, without success.

In Passir, nothing is being done, although the ground gives every indication of being rich oil territory.

In Balangan, the Balangan Exploration Company is searching for petroleum. The signs are excellent, but at present no well has been bored, although gas and traces of oil have appeared. Near the oil fields big coal deposits have been discovered, the extent of which will shortly be investigated.

In the Tandjong district, the Martapoera Company is at work. This concern has succeeded in striking oil twice, but has not yet bored a well that spouts. These wells will have to be pumped out to determine their richness. They have, for the present, been stopped up in order to prevent loss of oil.

In Labuan Mas, the firm Buijn is boring, but no spouting wells have so far been discovered. The ground shows every sign, however, of being as rich in petroleum as Koetei and Balangan.

The operations I have mentioned cover a very small part of the enormous island of Borneo, and a boundless field for American capital and energy is here offered. Petroleum, coal, marble, precious metals, and diamonds have been discovered. Wood and water are plentiful, and the only real difficulties are labor and climate. The former is being solved by importing coolies from China and Java; and as for the climate, one must be as careful as possible and trust to luck. In the interior, it is said to be not so bad, and recent developments have shown that most of the tribes of this part of the country are now friendly enough. The native sultans do all they can to encourage enterprise. The Dutch Government is inclined to keep out foreigners, but indications are not lacking that it will abandon that policy.

SIDNEY B. EVERETT,

BATAVIA, *April 26, 1899.* *Consul.*

FRENCH VIEW OF PHILIPPINE SITUATION.

The French consul at Manila has sent to his Government a dispatch containing a long list of enterprises which Americans are establishing in the archipelago, and warns his own people that they must be up and doing unless they want to be left far in the rear. I translate briefly:

The appearance of Manila is destined to change in a short time. The introduction of a new and powerful factor in the commercial problem of this country will compel Spanish merchants to close their houses or to entirely change their business methods. American competition has commenced, in fact, to assume alarming proportions. What will be the importance of this current when these newcomers are free to direct the commercial destinies of the Philippines—to flood this market with all the products of their industries?

The English and German merchants, formerly masters in this colony, watch with keen interest the events now in progress and await, with undisguised impatience, the termination of the struggle between the Americans and the insurgents, that they may discern the turn that things will take. No one, however, doubts that a strong rivalry is about to arise, and they regret the past condition of affairs and the advantages they then possessed.

Many of the wealthy people, mixed breeds, and Indians have left for Hongkong or suspended business, and, as their expenditures and style of living will be reduced in the future, the value of the market, as an importing center, will diminish. It will be more than ever necessary for the French merchants to study their interests in this market, not by depending upon consular reports, but by sending commercial travelers here to investigate special lines of business. It is probable that under the enterprising and energetic methods of American business men, a new and richer market will soon be opened on these islands, both in imports and exports.

JOHN C. COVERT,
Consul.

LYONS, *June 14, 1899.*

COTTON-SPINNING MACHINERY IN JAPAN.*

I can not ascertain that any machines have yet been imported into Japan for spinning yarns with which to manufacture either vigogne, shoddy, carpets, or fustians. The textile business here chiefly requires machinery for the spinning of yarns for manufacturing goods in cotton, silk, flax, ramie, wool, and worsted.

All cotton-spinning machinery in Japan, except some of the reeling machines and some other accessories, has been imported from

*The above report was made in answer to inquiries by the Philadelphia Commercial Museum, to which Advance Sheets have been sent.

England. The total number of mule and ring spindles is about 1,300,000.

Woolen machinery has been chiefly supplied by German and French makers; some by English firms. The manufacture of woolen goods in this country, however, remains as yet in a very primitive condition, not more than 20,000 spindles being in place. Silk, flax, and ramie machines have been mostly supplied from England, but a small number of them have come from Germany and France. The total number of spinning machines is about 50,000, and they are said to be working satisfactorily. In conversations with prominent manufacturers, I have learned the English manufacturers do not send their cotton and other machinery here to be dealt with by unskilled Japanese workmen, but that they send their own expert workmen along with their machinery, who carefully instruct the Japanese in its use. The latter quickly learn to handle it. The fact that English manufacturers do this creates a strong feeling in their favor, which brings buyer and seller in much closer connection. Japanese manufacturers inform me that spinning mills have proved quite profitable from the start, and that consequently they have found no difficulty in capitalizing their business. They also say that hitherto they have ordinarily preferred spinning machinery made by the same manufacturers; but, having become more and more used to all kinds, they do not now feel so tied to that practice, but are prepared, other things being equal, to welcome competition from any quarter, and this new condition I would especially commend to our American manufacturers of machinery. The field should be entered by them, in order to supply a fair proportion of the cotton and other spinning machinery and equipment in the great manufacturing city of Osaka and elsewhere. In exporting to Japan other lines of machinery, the United States has made notable progress, and there is no doubt we would succeed if we exploited the market for a good share of cotton-spinning machinery also, as the Japanese mill owners are looking for American estimates.

The demand for textile machinery, other than for the spinning of cotton yarn, is not large.

As to terms of payment, it is usual to advance one-third the value on confirmation of the order; the balance on delivery, a proportionate amount being paid on each invoice received.

I subjoin the following price list for a certain power loom made in England, used in the manufacture of ginghams, the same being with brake, strap, weft, and positive taking-up motions, plain treading motion, wood cloth roller, cast-iron yarn and back rollers, polished bay-wood hand top, with Clegg's picking and box-lifting motion and two shuttle boxes on one side of loom, including one

set of chain links and pins, weighting chains and fluted and chased surface roller, slip catch to taking-up motion and cast-iron bush to loose pulley:

Description.	Price.	
	£ s. d.	
32 inches reed space.....each...	18 6 6	$89.17
36 inches reed space.....do.....	18 11 6	89.39
40½ inches reed space.....do.....	19 0 0	92.46
45 inches reed space.....do.....	19 7 6	94.28
49½ inches reed space.....do.....	19 18 0	99.28
54 inches reed space.....do.....	20 14 0	103.17
55½ inches reed space.....do.....	21 15 0	105.85
63 inches reed space.....do.....	22 15 0	110.71
Extras.		
3 shuttle boxes on one side in lieu of 2 as above.....per loom...	0 13 4	3.24
4 shuttle boxes on one side.....do.....	0 26 4	6.41
2 shuttle boxes on both sides.....do.....	3 14 6	20.56
3 shuttle boxes on both sides.....do.....	4 4 0	20.44
4 shuttle boxes on both sides.....do.....	5 0 0	24.33
3 shaft twill motion in lieu of plain.....do.....	0 20 0	4.87
3 shaft twill motion as well as plain.....do.....	0 30 0	7.30
4 shaft twill motion in lieu of plain.....do.....	0 20 0	4.87
4 shaft twill motion as well as plain.....do.....	0 33 6	8.15
Plain treading as well as 3 and 4 shaft twill motion.....do.....	0 45 0	10.95
Wooderofts tappets 6 shafts, 12 to round in lieu of plains.....do.....	0 45 0	10.95
Also add for 2 inches additional reed space positive easing motion with eccentric and 2 shafts.....per loom...	0 6 0	1.46
1 pair of self-acting double-capped temples, 2 rollers each, rods and fixings:		
Iron rollers and iron caps.....per loom...	0 5 0	1.22
Iron rollers and brass caps.....do.....	0 7 3	1.76
Steel rollers and iron caps.....do.....	0 6 0	1.46
Steel rollers and brass caps.....do.....	0 8 3	2.01
Brass rollers and brass caps.....do.....	0 10 0	2.43
Lathe for large shuttles in lieu of ordinary sizes:		
For looms with 2 shuttle boxes on one side.....do.....	0 6 0	1.46
For looms with 3 shuttle boxes on one side.....do.....	0 9 0	2.19
For looms with 4 shuttle boxes on one side.....do.....	0 11 0	2.68
For looms with 2 shuttle boxes on both sides.....do.....	0 11 0	2.68
For looms with 3 shuttle boxes on both sides.....do.....	0 16 6	4.01
For looms with 4 shuttle boxes on both sides.....do.....	0 20 0	4.87
Tender and stay to long end crank.....do.....	0 4 0	.97
Yarn beam in two parts.....do.....	0 15 0	3.65
Wrought-iron yarn beam (in lieu of cast iron), 28 inches reed.....do.....	0 7 6	1.82
Wrought-iron yarn beams (malleable iron flanges), 28 inches reed.....do.....	0 8 0	1.95
Platts' improved loose-reed arrangement.....do.....	0 15 0	3.65
Positive easing motion with half round back rest.....do.....	0 3 0	.73

I have not succeeded in obtaining a price list of power looms with positive valvular frames.

Prices for this port should be quoted "c. i. f.," delivered at Hiogo (Kobé), so that the entire cost may be clearly placed before purchasers.

SAMUEL S. LYON,
Consul.

HIOGO, *May 18, 1899.*

ELECTRIC INDUSTRY IN JAPAN.

Consul-General Gowey transmits from Yokohama, May 11, 1899, a clipping from the Japan Times containing interesting information relative to the electric industry in Japan, as follows:

ELECROPLATING.

This branch of the electric industry dates back to about 1887, when a workshop was first started in Mita, Tokyo. For six or seven years the workshop had to contend against great odds, leading to repeated changes in its ownership. The outbreak of the Japan-China war did very much towards reviving the business. Subsequently, it experienced more or less vicissitudes incidental to the economic changes at large, but it may be said to have fairly taken root. Our electroplaters, however, are placed in a disadvantageous position in contrast to their Western confrères, the art being kept a secret in the West and there being no Japanese electricians who can teach them on this subject beyond broad theories contained in books, and even these not up to date. The consequence is that our artisans have no better alternative than to find out by dint of perseverance and repeated experiments and with imported samples before them the process they wish to discover. Taking all these things into consideration, the progress attained by our artisans is said to be quite creditable, especially since they have begun to use gas engines, for they are now enabled to turn out articles not much different in finish from those coming from abroad. There are at present some two hundred electroplating shops in the city, but of these there are only one or two where the business is carried on on a large scale, the others undertaking the work merely as jobs. Nickel plating is most in demand and more profitable, compared with silver and gold. No definite information can be obtained as to the volume of yearly output of electroplated goods, though the demand is reported to have doubled during the five years ending 1897. Some shops in the same line appeared a few years ago in Osaka, and, like nearly all the industrial pursuits in that southern city, began, in competition with their Tokyo confrères, to turn out a cheap and inferior class of articles. The Osaka artisans have been beaten in this contest, so that at present Tokyo may practically be regarded as monopolizing the business in Japan.

TELEPHONE APPARATUS.

The manufacture of telephone apparatus has so far advanced in Japan that, with the exception of springs, for the supply of which foreign aid is still depended upon, all other necessary paraphernalia can be made at home at about one-half the cost of foreign goods. At present, therefore, only a very small portion of telephone apparatus is being imported. Foreign instruments are used only in such places as Tokyo and Osaka, where the telephone connections are in brisk demand. Again, when the Communications Department is in need of a large supply for immediate use, it is obliged to patronize the foreign makers, it being not easy to procure the supply of Japanese instruments within a short time in any large quantity. The manufacture is carried on both at Government and private shops, between which no particular difference is noticeable regarding workmanship. It is thought in some circles that, to encourage the development of the industry, the Government shops ought to be closed and greater patronage accorded private enterprises.

There are in Tokyo quite a number of such factories, of which only two or three are doing business on a large scale. There exist also a few in Osaka, as usual turning out a cheap and inferior quality.

ELECTROMOTORS.

The electromotors made for the Kawasaki Electric Tramway at the Shibaura Engineering Works are the first of the kind made at home, those heretofore used by the Kyoto, Nagoya, and other tramway companies having been obtained from abroad. The Kawasaki Tramway is highly satisfied, we are told, with the Shibaura dynamos; for it has found them, so far as its experience goes, just as good as those of foreign make employed by other establishments. It is said that the Shibaura works have since secured orders to construct a number of the same apparatus for the Hoshu Electric Tramway Company. Of the materials required for their construction, the Shibaura works can obtain at home everything but wheels and springs, which have to be imported.

PASSENGER TRANSIT IN JAPAN.*

In addition to abundant steam communication by coasting and inland-sea vessels, there are now in operation here over 3,000 miles of railroads, part of which are Government lines. An electric tramway is in operation in Kyoto and horse cars run in Tokyo. Owing to the general use of the handy and ubiquitous jinrikishas and abundant coolie labor, passenger transportation by other means has not received much encouragement.

The rates of fare on railroads average about 2.1 cents per mile for first class, 1.4 cents per mile for second class, and seven-tenths of a cent per mile for third class.

Jinrikisha fares frequently depend upon bargains made at the time of hiring; otherwise they are about 10 cents per ri (2½ miles) in the country and in the cities about 3½ cents for a short trip and about 9 cents per hour. On the tramways, fares are cheaper, and depend upon the length of a trip. The number of passengers that may be carried is restricted by regulations. On the railroads, overcrowding is a frequent cause of complaint.

As to duration of franchises, amounts paid for them, and taxation, I can only say that there is quite a diversity in terms of charters; that some of the lines have received Government assistance; and that generally taxes are levied as upon other private property.

JOHN F. GOWEY,
Consul-General.

YOKOHAMA, *April 25, 1899.*

*This report was written in answer to inquiries by a Chicago firm, to which Advance Sheets have been sent.

PASSENGER TRANSIT IN SHANGHAI.

Consul-General Goodnow sends from Shanghai, June 3, 1899, a letter to a Chicago firm,* from which the following information is extracted:

In this consular district, passenger transit on land is effected by—

(1) Rickshaws and wheelbarrows propelled by men. This is the general method.

(2) In Shanghai, most foreigners and some Chinese have horse carriages. This is limited to Shanghai, as the outside Chinese roads are not adapted to four-wheeled vehicles.

(3) From Shanghai to Woosung (14 miles) is a steam railway. The traffic is yet very light and does not require special regulations.

Transit on water is effected—

(1) By steamboats.

(2) By native junks (with sails), lorcnas, and boats with oars.

All transit business is in the hands of private enterprise. The fare by rickshaw is 15 cents Mexican (7.2 cents United States) per hour; by wheelbarrow, about 7 cents Mexican (3.4 cents United States) per hour; by donkey, 90 cents Mexican (43 cents United States) per day; by steamer, about 10 cents (4.8 cents United States) per mile, including food and lodging; by rail, about 6 cents (2.9 cents United States) per mile.

PROPOSED RAILWAY CONSTRUCTION IN FORMOSA.

I have been unable as yet to obtain any detailed information regarding the new railway line to be constructed in the island, as Chief Engineer Hasegawa, the officer in charge, is at present in the south. Only 2,000,000 yen ($1,000,000) have been appropriated for the year's work, and, I am informed by the chief of the communication department, it will be expended as follows: Work will be at once commenced at Takow on the Takow-Tainan branch, a line 28 miles in length. The land is quite level, and the work presents no difficulties, save the bridging of two small rivers. Trains will be running over the Takow branch in two years.

The present northern line runs from the Tamsui River in a southerly direction 40 miles to Hsinchiku (Teckcham). It was built by

* To which Advance Sheets have been forwarded.

the Chinese and completed in 1893. From the Tamsui River opposite to Twatutia, the foreign settlement, the line runs over nearly level ground for some 7 miles. It then ascends a table-land, on a maximum gradient of 1 in 30, and for the rest of the distance, with the exception of a few miles outside of Hsinchiku, it zigzags through the hills on the right side of a picturesque valley, up and down grade as though built on the model of a corkscrew. It has always been unsatisfactory, and portions of the line have been frequently destroyed by storms and freshets. Formerly, a bridge across the Tamsui River permitted the trains to run into Twatutia; but this, as well as several bridges a few miles from Hsinchiku, was destroyed during last year's great typhoon, one large iron bridge being carried 87 yards by the force of the wind and current. At present, therefore, the line does not touch either of the original terminals.

The Japanese find that this line must be almost entirely rebuilt. A new bridge nearly 2,000 feet in length and costing some 800,000 yen ($400,000) will be constructed across the Tamsui River at Twatutia, and the route will follow in a general way the original road, though while passing through the hills it will be on the left side of the valley and by the aid of two tunnels and many cuttings will be much straighter than the old line. The bridge will be commenced this year, and the line probably finished in two years. From Hsinchiku (Teckcham) to Tainan is 145 miles, and it is the intention to build the railway between these two points as soon as the work mentioned above is completed. This line will require numerous and expensive bridges and some thirteen tunnels. When completed it will give a railway service from Kelung to Takow, a distance of 205 miles.

I am pleased to be able to state that the chief of the communication department informs me that in all probability the locomotives, rails, and bridge material will be obtained from the United States, and that the order will, he believes, go to the Carnegie Company, of Pittsburg. I am unable at present writing to give information as to the extent of this order, but will write on the subject later. The gauge of the present line is 3 feet 6 inches, the rails 36 pounds, and the ten locomotives used are of English and German manufacture. The new locomotives will be heavier than the ones at present employed, and the rails 60 pounds.

JAMES W. DAVIDSON,
Consul.

TAMSUI, *June 6, 1899.*

RAILWAY CONSTRUCTION IN THE TRANSVAAL.

The Department has received a report from Consul Macrum, of Pretoria, dated June 13, 1899, announcing the publication in the Government Gazette of the following call for proposals for the construction of railway lines in the South African Republic:

Request for tenders for the building of—

(1) Railway from Belfast, via Dullstroom, to Lydenburg, connecting at Belfast, or vicinity thereof, with the railway line from Komatipoort to Pretoria.

(2) Railway from Pretoria, connecting at the Pietersburg-Pretoria railway station, via Skinnerscourt and Krokodilpoort, to Rustenburg.

In the terms of legislative resolution, article 1814, of November 23, 1898, notice is given hereby that applications or tenders are expected at the office of the commissioner of railways at Pretoria—

Till Thursday, August 3, 1899, for the Rustenburg line.

Till Thursday, October 12, 1899, for the Lydenburg line.

On both days at 12 o'clock noon.

Applications must be tendered as follows:

(1) The amounts of contract must be given in detail. The full contract price must be given.

(2) Desire as to payments.

(3) Rate at which Government 4 per cent bonds will be accepted in payment.

Full information as to conditions is to be had at the office of the railway commissioner at Pretoria on and after July 1 next upon payment of £1.

Tenders must be written in the language of the country (Dutch), and must be marked, respectively, "Tender voor den bouw der Spoorweglyn Pretoria-Rustenburg" and "Tender voor den bouw der Spoorweglyn Belfast-Lydenburg."

Further information is to be had at the offices of the Government commissioner of railways and the technical inspector and head engineer for railways in the South African Republic.

Plans will be at the office of the technical inspector and head engineer of railways—

For the Rustenburg line on and after July 7 next.

For the Lydenburg line on and after September 7 next.

IMPORTERS IN THE SOUTH AFRICAN REPUBLIC.

Consul Macrum sends from Pretoria, May 11, 1899, the following list of the leading importers in that city and Johannesburg, as of possible value to manufacturers and exporters of the United States:

BOOTS AND SHOES.

Johannesburg.—Anglo-Austrian Company, P. Barnett & Co., T. W. Beckett & Co., T. Birch & Co., Chudleigh Bros., Cooperative Store, W. M. Cuthbert & Co., Curtis & Co., F. Dana, Green & Co., M. W. Kneebone; Harvey, Greenacre & Co.; Letherby & Mottram,

M. A. Lyons & Co., Miller & Bland, H. W. Markham, Paddon & Brock, Payne Bros., H. Plaut, Store Bros., Reid & Jackson, F. Stevens; Thorne, Stuttaford & Co.; U'Ren & Cary.

Pretoria.—Beckett & Co., Cuthbert & Co., Green & Co., Robt. Hamilton; Henwood, Son, Soutter & Co.; John Jack, Limited; A. Johnson & Co., Lilienfeld & Co., Millar & Co., Payne Bros., Frank Stevens.

TOBACCO.

Johannesburg.—Acme Company, Anglo-African Agency, Atlas Tobacco Works, Barsdorf & Co., P. Burmeister & Co., Driman Bros., Findlay & Co., Fine Bros. & Co., J. A. Freeiks, B. Gundelfinger, W. B. Hall, Holt & Holt, A. H. Jacob, Ph. Japhet, C. Langenstrass, M. Levin & Co., Herman Myers, Peerless Cigarette Company, Rand Cigar Factory; Rolfes, Nebel & Co.; South African Tobacco Company, Seelig & Co., Stern & Co.; Weiner, Schwab & Co.; Wolf & Elias.

Pretoria.—De Jager & Co., M. Hartfield & Co., D. Levin, A. A. Marks, Moosdyk & Co., B. van Erkom.

BICYCLES.

Johannesburg.—The Adler, Coventry Cross Cycle Company, Cycle Bee Hive, M. Dent, Defiance Cycle Company, Gladiator Cycles, W. B. Hall, Humber Cycle Depot, James & Hewstone, Metropolitan Cycle Works, Monopole Cycle Agency, New Howe Cycle Agency, Osmond Cycle Company, G. H. Clapp, Rover Cycle Company, Rudge-Whitworth Company, Shimwell Bros., F. & P. Weldon, Steen & Schou, G. H. Preston, Transvaal Cycle Company, Wright & Tacchi, E. Williams.

Pretoria.—Crescent Cycle Depot, H. H. Fraser, Humber Company, F. J. Pemberthy, Sluyter Bros., Transvaal Athletic Depot, W. A. Vissers.

FANCY GOODS.

Johannesburg.—Argus Company, Bockris Bros., C. Bockris, W. G. Botha, Brister & Co., W. E. Burmister, Continental Fancy Bazarre, Emanuel & Co., B. Gundelfinger; Hubner, Van Herwerden & Co.; Kensington Art Repository, S. J. Kerdachi, G. J. Kettle & Co., Lazerus & Rosenfeld, D. Lavenstein, Meedelssohn & Bruce, H. Michaelis, Navum Bros., H. Plaut; Riege, Maas & Co.; W. Saphra, Theo. Seaf, Transvaal Warehouse Company, M. P. Valentine, Y. Veldhuisen; Wiener, Schwab & Co.; W. Zimmerman.

FURNITURE.

Johannesburg.—L. Bacchioni, Barsdorf & Co., Beckett & Co., Belcher Bros., Brister & Co., Cox & Collinett; Gordon, Mitchell &

Co.; S. Gordon & Co., W. B. Hall, H. G. Hawkins & Co., Henwood & Co., Hillson & Taylor; Hirsh, Kahn & Co.; Holt & Holt, H. M. Light, T. G. Litchfield, Noble & Jardine, Phillip Bros., Remington Typewriter Agency, E. & A. Rogaly, Rose Bros., Titlebaum Bros.; Thorne, Stuttaford & Co.; Julius Vogl, R. I. Wilson, Wooff & Elias, W. Walker & Sons.

Pretoria.—Beckett & Co., R. Boukamo, Cairncross & Zillon, Co-operative Stores; Harvey, Greenacre & Co.; Henwood & Son, Hoyer & Bock, Kantor & Shiff, Looyen & Voorloop, K. C. Lucouw, Millar & Co., Store Bros., G. C. van den Gen, Van Willes & Co.

GLASS AND CHINA.

Johannesburg.—Alcock & Co., H. J. Gerdes & Co., Ed. Meyers, S. Podlashuk, D. Sniders & Co., Transvaal Warehouse Company, E. A. Webb, E. Wood, Zin & Nochemowitz.

GROCERIES AND CANNED GOODS.

Johannesburg.—P. Amm & Sons, A. Atkins & Co., Beckett & Co., James Bowie, Brown Bros., P. Chat & Co., W. Cullen & Co., R. L. David, M. Davies & Co., De Vries & Co., Aug. Edlund, Freeman & Boulding; French Grocery, Limited; Freiborg & Co., Frysh & Chainowitz, B. Gundelfinger, Harwin & Paterson, J. V. Hoffman, Sol. Liknaitsky, J. Lucas, P. McIntosh, McKee & Co., Merkel & Friedlansky, Paddon & Brock; Posthmma, Zwarenstein & Co.; Segall & Cheifitz, Sachs & Liknaitsky, Shlom & Ginsburg, B. Stein, M. Stolzenburg, A. E. Street, W. G. Sweeting, A. Tarboton & Co., W. Thrupp & Co., C. H. Thrupp & Co.

Pretoria.—Beckett & Co., Cairncross & Zillen, Cooperative Store, Diemeer & Co., Ettin & Kwitz, H. M. Galgut & Son, Izaak Haarhoff, F. J. Haarhoff & Co., B. Gundelfinger, E. G. Heather & Co., International Cash Store, A. Johnson & Co., Adolph Kraut, H. Leibman & Co., David Leith & Co., Tilanus & Van Griethuysen, Van Kerchoff & Co., G. C. van den Gen, Wulfse & Sievers, H. Zagt, Zaidel & Katzenellenbogen.

HARDWARE.

Johannesburg.—J. P. Ablett & Co., T. Alcock & Co., Barsdorf & Co., Beckett & Co., Beerstrecher & Co., Boustred & Co.; W. P. Browe, Limited; B. M. Cotton & Co., Douthwiate & Co., Dunton Bros., H. Farmaner & Co., A. Fass & Co.; Felber, Jucker & Co.; J. Forrest & Co., French South African Trading Company, H. Fuchs & Co., Griffiths & Co., H. J. Gerdes & Co., B. Gundelfinger, W. B. Hall; Hanson, Schrader & Co.; H. C. Hawkins & Co., Henwood & Co.; Hirsch, Loubser & Co.; W. Hoskin & Co., W. F. Johnstone & Co., C. J. Kettle & Co., Arthur Koppel, J. Lawrence & Co., Lee & Mc-

Cann, H. M. Light, E. Meyer & Co., E. Nettman & Co., J. & R. Nivin, G. North & Son, S. Olsen & Co., Paddon & Brock; Parker, Wood & Co; Parker Bros., Peycke & Co., Philip Bros., H. P. Plaut, Raleigh & Rocky, Randles Bros. & Hudson, Reid Bros.; Rens, Herron & Co.; G. S. Rideal, E. & A. Rogaly, S. P. Ruthven; Sheriff, Swingley & Co., M. M. Steytler & Co., S. Sykes, E. W. Tarry & Co., Transvaal Warehouse Company, Transvaal Trading Company, A. P. Walker, Weeks & Johnson Company, C. F. Wierand & Daniels; Wiener, Schwab & Co.; C. B. Wiley, Wolff & Elias.

Pretoria.—Beckett & Co., Cairncross & Zillen, Cooperative Stores, W. Francis & Sons, Izaak Haarhoff, Henwood & Co., A Johnston & Co., Ed. Meyers, Nettman & Co., Poynton Bros.

MACHINERY AND MINING SUPPLIES.

Johannesburg.—Herbert Ainsworth, Afro-American Company; Allen, Edgar & Co.; A. Thienhaus & Co., Barsdorf & Co., Brown & McKenzie; B. P. Brown, Limited; C. Cammell & Co., Chapin & Manion; Chester, Edward & Co.; Commercial and General Agency, Geo. Cradock & Co.; Davey, Paxman & Co.; W. Deacon & Co.; Eadon, Moses & Sons; Fraser & Chalmers, H. Fuchs & Co., C. C. George & Co., E. H. Green & Co., L. & L. S. Grunberg, Hamilton & Co.; Hansen, Schrader & Co.; Harvey & Co., Hosken & Co., H. Farrer & Co., W. Jessop & Sons, A. Koppel, Lloyd & Lloyd, Macfarlane & Co., J. & R. Niven, G. North & Sons, Ornstein & Koppel; Parker, Wood & Co.; F. W. Peters, Raleigh & Rockey, Reid Bros., G. S. Rideal, Reunert & Lenz, Robey & Co., S. P Ruthven, Theo. Seaf; Sheriff, Swingley & Co.; Seligmann & Co., H. Sladden, S. Sykes & Co., Transvaal Trading Company, E. W. Tarry & Co.; Technical and Commercial Corporation, Limited; Tangyes, Limited; Taylor, Shipley & Co.; United Engineering Company, Limited; C. F. Wienand, C. B. Wiley.

SADDLERY AND HARNESS.

Johannesburg.—P. Barnett & Co., P. B. Findlay & Co., K. M. Gibson, C. Greatrex & Son, S. Copper, J. Nestadt, Preddy Bros., R. Saddington & Son, J. Sanderson, W. Slatter, J. van der Schyff.

Pretoria.—C. T. Dames, C. Greatrex & Son, T. McCabe, H. Murray, Perkins & Cinnamon, C. G. Reitz.

STATIONERS.

Johannesburg.—J. Adams, Argus Co., N. Bayliss, W. G. Botha, M. E. Burmester & Co., Chicken & Co., J. G. Connock & Co., J. Dickinson & Co.; Epstein, Sallo & Co.; Furmage & Folkey, B.

Goodman & Co., A. Graf, Grocott & Sherry, Glover & McKowen, J. G. Inoe & Co., Johnson & Webster, J. C. Juta & Co., J. M. Legate & Co., Lorentz & Co., Mendelssohn & Bruce, H. Michaelis, Pearson & Co., Remington Typewriter Agency, W. Saphra, J. J. Simpson, Isodor Traube, M. P. Vallentine, A. Wilson; Wilson, Hedding & Co., M. J. Wood.

Pretoria.—Afrikannsche Boekhandel, Algemeene Transvaalsche Boekhandel, Argus Company, C. Basson & Co., R. O. Basson, W. E. Burmester & Co., J. H. de Bussy, M. R. Fraser & Co., Hoveker & Wormser, E. O. Meyers & Co.

TIMBER.

Johannesburg.—Bardsorf & Co., Beckett & Co.; W. P. Brown & Co., Limited; French South African Trading Company, Griffiths & Co., Grey & Harrison, Harvey & Co., Henwood & Co., W. Hosken & Co., Holland & Vardy; Hunt, Leuchars & Hepburn; W. F. Johnstone & Co., Johannesdals Timber Company, Lingham Timber and Trading Company, H. Mosenthal & Co., Norwegian African Company, Parker Bros; Parker, Wood & Co.; Phillip Bros., Rand Hardwood Company, Rand Timber Company, Rand Wood-Working Company; Rens, Herron & Co.; M. M. Stytler & Co.

Pretoria.—Beckett & Co., Cairncross & Zillen, W. Francis & Son, Izaak Haarhoff, Henwood & Co.; John Jack, Limited; A. Johnson & Co., Lingham Timber and Trading Company, Mosenthal Bros. & Wolff.

WALL PAPERS, OIL, AND COLORS.

Johannesburg.—T. Alcock & Co., Bellgrove & Snell, Bretherton & Welch, H. Evans, Garthorne Bros; Gordon, Mitchell & Co.; Henwood & Co., Kaufmann Bros., G. J. Kettle & Co., T. G. Litchfield, Paddon & Brook, Wolff & Elias.

FEDERAL MOVEMENT IN AUSTRALIA.

Under date of April 16, 1898, I sent a brief report* on the history and progess of the federal movement in Australia, and on June 6, the same year, after the constitution had been defeated by the people three days previous, in a supplementary report I said:

In my opinion, the federal movement as applied to the colonies above mentioned, to wit, New South Wales, Victoria, Tasmania, and South Australia, is dead for many years to come.

*See CONSULAR REPORTS No. 216 (September, 1898), p. 19.

Though the opinions then expressed were based upon a seemingly universal feeling among the people of all classes throughout the colonies, subsequent events have proven them erroneous, and I find the present situation a proper opportunity for again reverting to the question.

This federal movement presents a commercial aspect of considerable importance to our exporters. I will call attention to a few phases of Australian affairs of interest to our people.

The total import and export business of New South Wales for 1898 with all countries was £45,495,422 ($221,107,751), distributed as follows:

Country.	Amount.	
Australian colonies	£17,350,943	$84,325,583
United Kingdom	10,485,897	50,961,460
All foreign countries	9,973,557	48,471,488
United States	4,350,196	21,141,953

Our trade in staple articles has increased during the last five years 127 per cent, and now equals about 9½ per cent of the total business of this colony, whereas five years ago less than 3 per cent of her trade was with us.

In 1898, we had a trade with New South Wales in staple goods—aside from wheat, flour, and bullion—of £1,859,753 ($9,038,400), nearly every article of which came in competition with like articles from the United Kingdom.

At present, the ports of New South Wales are the freest on the globe, and in none of the Australian colonies are there any discriminating or differential duties. In this and all other Australian ports the United Kingdom meets the world on equal terms, but what changes the consummation of the federal scheme may bring about is a matter for speculation.

In my former report, I made brief reference to a possible "preferential" tariff by the federal parliament, should such a legislative body be created by the adoption of the proposed federal constitution. I may now say that, as it is considered by many that federation is within measurable distance,* this question of preferential tariffs in Australia may be worthy the attention of our statesmen and commercial classes.

Last year, this colony, under a law requiring a minimum vote of 80,000 to carry the bill, rejected the constitution by a vote of 70,996 to 65,619. The other colonies, though they had given good

*NOTE BY BUREAU OF FOREIGN COMMERCE.—The vote in New South Wales, which was taken on June 20, 1899, resulted in a majority in favor of federation of over 20,000.

majorities for the bill, did not deem it wise to federate without New South Wales, the most wealthy and populous of the group, and the whole movement was thought to have come to a protracted stand-still.

But the discussion during the federal campaign seems to have left the question nearer the hearts of the people.

A conference of premiers was held in Melbourne on January 28 last, and by mutual concessions an amicable agreement was reached, with a proposal that the constitution bill be submitted to the people of the respective colones for approval or rejection by referendum, and, as New South Wales had proven the chief obstacle to federation—Queensland not yet having entered—it was decided that the question be first submitted to this colony.

Save securing the federal capital to New South Wales—by a compromise to the effect that it should not be less than 100 miles from the metropolis—and providing an easier method of amending the federal constitution, little was gained for this colony by the conference, and a new and bitter contest arose.

When parliament convened, an "enabling act" submitting the amended bill to the people was passed by the lower house or legislative assembly, but rejected by the upper house. This "upper house" is composed of life members, appointed by the Government for the time being. As a rule, the members are elderly, respectable, wealthy, and conservative men, rather out of touch with the people.

Parliament was prorogued on March 29 and by a "constitutional power" the premier, an advocate of the federal cause, strengthened his side in the "upper house" by the appointment of twelve new members.

On April 11, parliament was reconvened and soon the enabling bill was passed and the referendum, or vote of the people on the amended constitution, is to be held on June 20 next.*

The other colonies will undoubtedly accept the bill if it is carried in New South Wales.

Under the proposed federal constitution, nearly all taxes or moneys for local, State, and federal purposes are to be collected by and through the federal machinery. This will necessitate a heavy "federal tax," and as any considerable excise tax, so long as all the states are striving to develop every industry, is improbable, a heavy duty on imports seems a foregone conclusion. There is a stong likelihood that this federal tax will assume a "protective" form, which would affect our trade, as well as all foreign trade, very materially.

As near as I am able to form conclusions from the data at hand, I would think that the average duty on, say, thirty leading articles

*See footnote, p. 105.

imported from the United States into these colonies would range thus: Victoria, 35 per cent; South Australia, 25 per cent; West Australia, 20 per cent; Tasmania, 26 per cent; Queensland, 35 per cent. In New South Wales, everything imported from the United States is free, except tobacco and a few articles under the head of spirits. On tobacco, if entered for local manufacture, the duty is 1s. (24.3 cents) per pound; otherwise, 3s. (73 cents) per pound; cigars and cigarettes, 6s. ($1.46) per pound.

It is possible that the new tariff may provide preferential duties for products from Great Britain. The movement among a class of British statesmen and business men to "consolidate the Empire" is not new to our reading people. About three years ago, Mr. Lowless, member of the British Parliament, came to Australia to find the sentiment of the colonies regarding imperial union and reciprocal trade. Mr. Lowless met little encouragement in Australia, but his presence and purpose impressed itself on many active and retentive minds.

Canada has set the example of preferential duties, and with Australia federated and a scale of duties necessarily high, a similar movement here should not be surprising.

The recent fiscal changes by the English Parliament, placing a duty on wines, have brought a protest from the Australian colonies and at the same time an expression of sentiment in favor of reciprocal trade with the Mother Country.

GEO. W. BELL,
Consul.

SYDNEY, *May 10, 1899.*

HARBOR IMPROVEMENTS AT VICTORIA.

Under date of June 6, 1899, Consul Smith, of Victoria, writes:

The scheme for the extensive improvement of Victoria Harbor, to which reference was made in my last annual report,* has secured recognition by the municipal and Dominion governments.

The representatives of Victoria in the Dominion Senate and House of Commons have secured a definite promise from the Government of the Dominion that a harbor commission bill will be passed during the present session to especially consider this project, and hopes are entertained that it will be indorsed and approved. The commission is to consist of seven members, three to be appointed by the Dominion Government, one member elected by the taxpayers of Victoria, one by the board of trade, another by the shipping interests, and the mayor of Victoria.

*See Commercial Relations, 1898, Vol. I, p. 319.

I inclose a map* showing the proposed "reclamation and improvements" embodied in this plan, which are of the most extensive nature, involving the expenditure of $6,000,000 and five years' labor. The following extracts from the Victoria Colonist of June 4, 1899, give an outline of the scheme:

The greater portion of the harbor is at present neither land nor water, and the passage available for steamers is tortuous, never 300 feet wide, crowded with rocks and shoals on every side. The proposition is to remove all these rocks and shoals, to use them in the reclamation of solid land, and to deepen the whole area of the harbor, from the open at Maclaughlin Point to 30 feet at low water, and to increase its available width and area.

It is proposed to close the lower harbor by temporary dams, to pump out the water, and excavate an area of about 167 acres to a depth of 30 feet, inclosing it within a wall built up of the rocks now impeding navigation, and filling in the balance behind with the excavated waste material, thus reclaiming about 109 acres of land that would become some of the most valuable property in the city. This reclaimed land in the upper and lower harbor will together have a frontage towards the water of about five miles. Very little material will be required in the construction of the work beyond that now actually lying at the bottom of the harbor.

The temporary dam at the mouth of the harbor would be about 1,350 feet across, with an opening left in the center about 85 feet wide, and could be completed without interfering with the shipping entering or leaving the harbor. The central opening would be closed by caissons during one tide, whenever all was in readiness. The dam with its extensions would form a temporary landing quay about 40 feet wide.

It is part of the proposition to connect the present V. & S. Railway by a branch with the central station on the Indian reserve, and also to extend these joint railways by harbor tracks along the wharves as far as James Bay; to construct coal bunkers in the lower harbor, and spacious dry docks and marine ways in the upper harbor of capacity sufficient to take the largest ships frequenting these waters. The harbor tracks would be fitted with hydraulic cranes and capstans. Warehouses would be built as the demand arose, and all the most approved appliances installed for the most economical and expeditious handling, storing, and transshipping of freight, and for the accommodation of the shipping frequenting the port, and at the same time the charges kept down to rates that should make this the most desirable harbor on the Pacific coast. These works would be gradually carried to completion out of surplus revenue.

The estimated total outlay is about $5,290,000. This expenditure would be extended over four or five years, the bonds being issued as the demand arose; and, although the bulk of the income would accrue on the purchase of the property, the charges for interest on the loan would rise but gradually, with the expenditure on works of improvement that would in themselves be revenue-producing. Thus the revenue during the first four years would, it is estimated, exceed $560,000; whereas the interest on the gradually issued bonds would not exceed $470,000, the surplus revenue being carried to capital account, thus reducing the amount required to be obtained on loan by about $90,000.

Instead of any direct grant of money from the city in aid of this great public undertaking, it is proposed that the city should convey the mud flats and other adjacent vacant spaces, to be filled up and converted into useful public property, from which an annual rent could be collected, which property would in due course become taxable to the city.

* Filed for reference in Bureau of Foreign Commerce.

For many years past, the Dominion Government has voted $10,000 to be spent in this harbor. It is proposed that the Dominion should increase this grant to $30,000 a year for a period of five years.

With reference to the repayment of the loan, the act provides that no surplus land shall be sold within ten years; but after that period, when prices may be considered established, any portion exceeding 60 feet away from the water's edge may be disposed of, provided the proceeds are applied solely to the redemption of bonds.

COVERED BERTHS IN SHIPYARDS.

Consul Metcalf, of Newcastle-on-Tyne, transmits, May 16, 1899, the following newspaper clipping, giving a description of the two covered berths at Wallsend-on-Tyne, an experiment which has created considerable interest in shipbuilding circles in England:

THE WALLSEND EXPERIMENT.

The heavy rainfall during the past week, which led to a practical stoppage of work in the outside departments in all the shipyards on the northeast coast, conduces to afford an indisputable illustration of the advantages of covered ship berths. Strange as it may appear, the firm of Messrs. C. S. Swan & Hunter, Limited, Wallsend, is the only shipbuilding firm in this country the representatives of which have gone to the extraordinary outlay entailed in the erection of stupendous structures to inclose the vessels on the berths. The idea of carrying such a project into effect originated in the mind of Councilor G. B. Hunter, the managing director of the company, conceived, it is understood, during a business tour in America, the huge structures inclosing the exhibits at the famous Chicago exhibition suggesting to his mind the practicability of the development of the principle on a more enlarged scale in the covering of vessels in course of construction on the berths. The firm named have no fewer than three shipyards—their east, west, and pontoon yards. The company entered into possession of the east yard in the year 1883 on a lease, and a few years later they purchased the ground in perpetuity, and hence it is in this department of their works in which two huge steel sheds have been erected, their present dimensions being 500 feet in length, 82 feet in width, and 100 feet in height. Having abundance of land at their disposal on the same level, the structures can be lengthened to 1,000 feet or more, as the ever-increasing demand for vessels of large dimensions may lead the company to lengthen the sheds to meet the requirements of the hour. In fact, the company has at the moment a magnificent steamer upwards of 600 feet in length on one of their berths, which is the largest vessel at present in the hands of any shipbuilder in the British Isles. It should be stated that, apart from the advantages accruing from the workmen in all the departments of the shipbuilding trade being able to follow their employment from Monday morning to Saturday at noon under the protection of the sheds, the facilities in point of labor are such that steady men of the best class are securing engagements with the firm. Mr. C. Stephenson, the yards manager, being gratified by the knowledge that he is gathering around him a class of men upon whom the utmost reliance can be placed in an emergency. Under such a condition of things, it will be understood that the firm gain in turn for the enterprise and outlay, inasmuch as they are in a position to undertake to build and equip the vessels in less than half the prescribed period essential for the execution of the work in the establishments in which climatic considerations naturally form an important factor. The workmen

in all the outside departments speak in terms of the highest commendation of the advantages which the inclosed berths afford, not the least of which is the greater safety to life and limb. It is known that many lives have been lost through the oscillation of the uprights, the ends of the staging becoming detached, and the men falling to the ground below; but as uprights are dispensed with in the case of vessels built under the sheds at Wallsend, a spirit of confidence is engendered among the riveters and other sections of the men, the stagings being attached to the massive still trellis work of which the sides of the sheds are composed. In point of expedition and the finish of work, the men participate largely in the facilities which the sheds afford. A plant in which all the latest improvements have been introduced, and driven by electric energy, is at the disposal of the men, by which the plates and bars are raised from the ground with the utmost promptitude by electric cranes and placed in position, one huge crane working on the roof with a 60-foot jib, while several cranes of lesser power travel immediately under the roof, which is of strong plate glass, as well as part of the sides which have been inclosed, with the result that the workmen are exempt from the discomforts not only of a stormy day, but of a passing shower.

PROSPERITY OF BRITISH COLONIES.

Ambassador Choate transmits from London, under date of June 17, 1899, a clipping from the London Times of June 6, as follows:

The lean years have gone by, and there is every reason to hope that British communities in different parts of the world are entering upon a period of fat years. This is the summary of the financial and industrial position which reaches us from the various groups of self-governing colonies.

First in the prosperous list stands Canada, where the fiscal year ends on June 30, and Mr. Fielding, the Dominion Minister of Finance, was able, in making his budget speech the other day, to estimate the surplus for 1898–99 at $4,600,000. The revenue for the year, assuming that the estimates of receipts for the last three months are well founded, will be $46,632,398, and the expenditure will amount to $42,026,028. This is a substantial advance on the revenue of last year, and the advance in expenditure, though considerable, is quadrupled by the receipts. In addition to the expenditure from income in the Dominion, there is every year for purposes of railways, canals, and other public works and services a further expenditure from capital account. This expenditure amounted last year to $8,662,795. Allowing for the deduction of the surplus and the outlay for sinking fund estimated in the regular expenditure, the net increase to the public debt of Canada will this year be $1,700,000. It was last year $2,417,802. In every particular the year shows a better result than last year.

Good harvests and the better prices ruling in the markets of the world for the staple produce of the colonies have, of course, much to do with the prosperity of Canada, as well as with that of Australia, to which allusion will presently be made. But there is something to be attributed to the increase of local enterprise which has resulted from or accompanied these conditions. The development of wheat farming and cattle breeding on the prairies and the opening of new productive mineral districts have helped to swell the total of Canadian foreign trade, as well as to increase the demand made by one part of the Dominion upon the produce and industry of the others. In the years which have been quoted the mineral production of Canada rose, in round figures, from an annual total of $19,000,000 to $38,000,000. The

actual increase of animal and agricultural products is more difficult to arrive at, but it has very greatly increased, and the number of farming homesteads taken up on Government lands in Manitoba has grown from 2,406 in 1897 to 4,848 in 1898. Along the course of the railway lately constructed through the Crow's Nest Pass of the Rocky Mountains into the mineral districts of southern British Columbia new towns are described as having "sprung up like mushrooms in a warm shower." In the Yukon district, where two and a half years ago there was a population of a few hundred persons, there are now upwards of 30,000, and the Atlin gold fields in the northern territory of British Columbia bid fair to rival the Klondike in their wealth. The eastern and maritime Provinces contribute their share to the general total. The annual reports of the boards of trade of Toronto, Montreal, St. John, and Halifax give satisfactory accounts of the condition of affairs in the Provinces for which they speak. The result of the general activity, though imperfectly summarized by export and import returns, is yet very perceptible in the fact that in the years for which the figures of revenue and expenditure have been given, the total of Canada's foreign trade has risen from $240,000,000 to $304,000,000. It is the first time in her history that Canada has touched or even approached a total of $300,000,000; but Mr. Fielding, in estimating the prospects of the coming year, anticipates results of a still more satisfactory character.

If we turn to Australia as it hovers on the brink of federation, we find a condition of affairs which, notwithstanding the heavy blows of the past, promises scarcely less well for the future. In Victoria, where among the more important colonies the financial position has given the greatest cause for anxiety, the revenue returns are such as to justify the anticipation of a surplus for the year of £250,000 ($1,216,625), and there also treasury returns do not stand alone in bearing witness to an era of reviving prosperity. In mineral development, gold and coal, which are the two principal products of Victorian mines, show a substantial increase; while in agricultural and garden produce the total value of the output has risen in five years from £5,000,000 ($24,332,500) to £7,000,000 ($34,065,500) in round figures. The value of pastoral and dairy produce remained stationary in Victoria up to the end of last year, but the steady advance which has been taking place in the price of wool and meat is now making itself felt, and has greatly benefited the pastoral industry in the colonies of New Zealand, New South Wales, and Queensland. The total value of pastoral property in the seven colonies of Australasia was estimated in 1897 at about £238,000,000 ($1,158,227,000), exclusive of the value of freehold land, and the annual return of produce was at the same time calculated at £35,000,000 ($170,327,500). A very small increase in price is therefore sufficient to give a large increase in value and corresponding prosperity to Australian pastoralists. The quotation for Canterbury mutton has this year reached a figure 8½ per cent higher than it did last year. Queensland beef has moved up 13 per cent. The value of merino wool has advanced something like 50 per cent from the lowest point which it touched in 1895. Victorian fruit, both dried and fresh, is making a good name for itself in the London market. The dairying industry through all the colonies is in a soundly prosperous condition, with every prospect of expansion as the taste for good and cheap butter grows in the manufacturing populations of the whole world. The troubles in the sugar trade have not prevented the sugar output of the northern part of Australia from increasing nearly 50 per cent upon the output of last year. The area of cultivated land in New South Wales has doubled itself within the last five years, with a very remarkable increase in the year 1898. New land legislation has contributed to promote a movement in the same direction in Queensland, and, as the average difference in value of produce between an acre of pastoral land and an acre of cultivated land is as the difference between 1s. 4d. (32.4 cents) and £3 16s. ($18.49), it is not difficult to perceive the importance to the

Australian colonies of such a development. In Queensland, the prospects of mineral development on a large scale are regarded by mining authorities as most satisfactory. It is a happy moment in which the hope of federation has assumed a practical form in Australia, and, if any parallel can be drawn from the effect of federation upon Canada, it is probable that, if the great change is successfully carried into operation in the course of the coming year, Australia will enter upon the new century in a condition no less satisfactory in every particular than that already shown by the Dominion.

In South Africa the prospects of political unification are more doubtful, but there also the dominant industrial note is one of revival and expansion. There, apart from political troubles, the principal feature of anxiety in the industrial situation has of late years been a heavily preponderating balance of imports over exports. For the two years of 1896–97 the excess of imports over exports was very great; but in 1898 the balance restored itself in favor of the export trade, and the figures of trade were £26,709,000 ($129,979,349) worth of exports and £24,500,000 ($119,229,250) of imports, giving a combined total of £51,209,000 ($249,208,599), as against a combined total for 1897 of £48,674,906 ($236,876,430). The entire white population of South Africa does not yet reach 1,000,000 persons, and when this total of foreign trade is compared with the £61,000,000 ($296,856,500) done by the 5,000,000 inhabitants of Canada and with £74,000,000 ($360,121,000) of external trade done by the 4,500,000 inhabitants of Australasia, it is evident that some special circumstance must govern South African trade relations with the outside world. The special circumstance is, of course, to be looked for in the very large output of gold and diamonds, and the fact that South Africa has to import almost everything that is required by the white population. South Africa has practically no manufactures, and it does not feed itself. The gold output this year reached £16,000,000 ($77,864,000) in value, and though this must not be reckoned as the produce of a British colony, coming as it does mainly from the Transvaal, it is largely the result of the industry of British subjects. The existence and development of the gold-mining industry of the Rand have profoundly affected the industrial position of the surrounding British colonies, and its prosperity is scarcely less a matter of colonial concern than is the existence of the Kimberley diamond industry. The companies working at Johannesburg employ nearly 10,000 white men at an average wage of £24 ($116.80) a month, and about 68,000 natives at an average wage of £2 9s. 9d. ($12.11) a month and rations. These companies in 1898 increased their gold output by about £4,500,000 ($21,899,250) as compared with 1897. They also distributed in dividends £4,834,160 ($23,525,440), or £2,120,890 ($10,321,311) more than in 1897. From Rhodesia during the past year, a contribution of about £200,000 ($973,300) worth of gold has been made from the little beginning of five paying mines now working with ninety stamps in the northern district, and that number of stamps will be trebled by the end of this year. The principal industry of South Africa has therefore, in spite of the too well known difficulties by which it is hampered, made very remarkable progress in the past year. Putting gold, diamonds, and copper aside as special products, there is, further, the satisfactory indication of the existence of the elements of prosperity in the fact that the exports of general produce from South Africa rose from £4,401,000 ($21,417,467) in 1897 to £5,551,196 ($27,030,955) for 1898. Outside the gold industry, South Africa possesses through a great portion of its extent one of the best climates and the most fertile soils in the world. To give the natural elements of prosperity the same fair chance of fruition that they have in other countries developed under the protecting power of Great Britain is an object which President Kruger and Sir Alfred Milner may well unite in seeking as the outcome of the conference at Bloemfontein.

TRADE SUGGESTIONS FOR ASIATIC TURKEY.

Consul Washington sends from Alexandretta, under date of June 2, 1899, copy of a report by the British consular representative at Erzerum, containing suggestions for increasing the trade of his country with Asiatic Turkey. Mr. Washington thinks that the information may be of value to United States exporters, as showing the kind of competition they are likely to encounter. The report reads, in part:

Trade catalogues and price lists, edited to suit the different localities of this country, with comparative measures and prices in both languages, would be valuable. At present, English catalogues reach me with no comparative price list in the currency of this country, and of manufactures utterly unsuited to this district. Recently, a catalogue of bicycles came to hand, none much cheaper than £20 ($97.33) apiece. This betrays ignorance or carelessness. No bicycles can be used here, where a decent road is unknown, in a mountainous district varying from 5,000 to 10,000 feet high. Even if they could be utilized, no one could afford to pay more than £2 or £3 ($9.73 to $14.60) for a machine.

The distribution of catalogues should vary according to the very different requirements of each district of Asia Minor. Thus, goods for Adana would be useless in Erzerum.

For the above reasons, I would advocate the establishment, by interested British merchants and manufacturers, of a central office in Constantinople for the collation and distribution of catalogues and other information, as a center of reference for native merchants to ascertain comparative weights, measures, and prices, and to communicate the wants of this country to manufacturers at home. Such an agency might also serve as a general commission house for the transaction of considerable business now passing to Germany and Austria. The fact that almost all merchants in the provinces obtain their goods from middlemen in the capital points to the advantage of what I here advocate. It would be of much benefit to British commerce in Asiatic Turkey, where each district has its own particular rate at which gold payments are accepted. Thus, at Adana this rate is 136 piasters to the English £1. In Erzerum, it is 109 or 110 piasters. At Constantinople it is, I believe, 118 piasters, and so on. How is it, then, possible to compile comparative price lists in England? At Adana, a tropical summer heat prevails for seven months, while at Erzerum the thermometer registers a general winter temperature of some 40° of cold. Yet at both places I have received identical catalogues of goods totally unsuitable for the one or the other locality. Again, the advocated agency would, in my opinion, turn into British channels many orders now going elsewhere. Many merchants are deterred from direct dealings with England through ignorance of the necessary methods for establishing such a trade. They are driven for their orders to unscrupulous Greek or Armenian middlemen in Constantinople, who palm off on them the cheap wares of other countries, the prices of which enable them to make a higher profit than on our more expensive, but better, goods.

I hesitate to advocate, at Constantinople, anything so extended as the formation of an amalgamated company of British manufacturers or merchants. I can not think that this is practical or necessary. It is not to be expected that our merchants would risk their capital in such an enterprise without having first some fair guaranty of remuneration. Nor would I establish at such a center a general corps

of commercial travelers. I am persuaded that such an understanding would not pay, with the difficulty of regulating fairly the share of business interests of each firm; of controlling unprincipled individuals who might use unfair means to stimulate their own concern through undue remuneration to the traveling agents, or other means. Thus, one might offer 5 per cent and another 10 per cent remuneration on all undertakings. In the East especially such a scheme is impracticable. The plan which I propose is something far simpler. It is nothing more than a reference agency, at very small cost, open to every branch of trade, at which all classes of business can be done at a fixed rate, such as the compilation of catalogues, comparative price lists, the distribution of suitable catalogues in different districts, the drafting of letters in the vernacular of the country, replying to all questions, and many other useful matters. If a certain number of British firms would join in starting such an enterprise, a guaranteed sum of from £1,800 to £2,000 a year would probably be sufficient to maintain it, the private work of individual firms going afterwards to defray extra expenses incurred in fulfilling the objects of the agency already set forth. The agency would also be found useful for the collection of bad debts.

If our mercantile classes will not give themselves the little trouble entailed by this proposal in order to endeavor to develop and recover our trade at such small monetary risk, the fault will lie with themselves alone if commerce slips more and more through their fingers into the hands of foreign traders. In my own district alone, I could put such an agency in the way of bringing much small trade to England, such as paper, cloth, fezzes, fancy goods, and many others, which now goes elsewhere owing to the impossibility of explaining the necessities of this country to merchants totally unacquainted with its peculiarities. This is the chief reason why so much trade in smaller articles now goes to foreigners who, not content with supplying the Greek and Armenian middleman, have established the means of directly studying and satisfying the wants of the local merchant. Most foreign houses, besides, have a traveling partner in their business, with a good linguistic knowledge, who travels in order to pick up useful hints independently of the information which comes from their agents. It is by such means, alone, that we can hope to retain our trade in these days of increasing competition.

THE INDIA-RUBBER TRADE.

The past year has been a notable one as respects imports of india rubber in the controlling markets of Great Britain and the United States.

The following printed tables show the increase in receipts in England, the United States, and the primary Brazilian market of Para for the year 1898, compared with former years.

Imports into England.

Description.	1898.	1897.	1896.
	Tons.	*Tons.*	*Tons.*
Imports of other rubber besides Para	10,676	9,229	8,714
Deliveries of other rubber besides Para	10,369	9,370	8,691
Stock of other rubber besides Para	1,208	890	1,031
Imports of all stock of rubber to England	20,026	16,957	18,016
Deliveries of all sorts of rubber to England	19,305	17,604	17,514
Stock, December 31	2,014	1,369	2,010

Imports of crude india rubber into the United States (calendar years).

From—	1896.	1897.	1898.
	Pounds.	*Pounds.*	*Pounds.*
United Kingdom	5,696,039	7,962,039	10,853,611
Germany	1,061,015	1,289,577	1,716,521
Other European countries	2,319,278	4,166,474	5,504,449
Central America	1,127,580	1,014,630	1,205,400
Mexico	114,010	113,976	192,122
West Indies	39,103	17,795	35,327
Brazil	21,933,727	25,744,128	22,287,508
Other South American countries	1,283,927	1,357,964	1,723,189
East Indies	471,378	468,276	673,184
Africa	3,228	10,960	7,162
Other countries	10,624	13,307	57,463
Total	34,059,909	42,159,126	44,256,026

Monthly entries of rubber at Para.

Month.	1897–98.	1896–97.	1895–96.
	Tons.	*Tons.*	*Tons.*
July	970	815	801
August	1,130	856	937
September	1,640	1,242	1,044
October	1,890	1,602	1,785
November	2,660	1,699	1,564
December	3,150	1,974	2,109
First half of crop year	11,440	8,188	8,240
January	3,320	2,298	1,889
February	2,650	1,760	1,742
March	1,750	1,011	1,254
April	1,270	575	478
May	977	551	775
June	850	733	922
Second half of crop year	10,817	6,928	7,060
Total for the crop	22,257	15,116	15,300

English prices of crude rubber have been:

Description.	Lowest point.	Highest point.	Closing December 31—	
			1898.	1897.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Fine Para	3 5¾	4 4½	4 1	3 5½
Bolivian	3 7	4 5½	4 1½	2 7½
Scrappy negro heads	2 7	3 7	3 7½	2 6½
Para negro heads	2 2	2 11	2 11	1 11½
Cameta	2 5	3 3	3 0	2 5
Mattogrosso	3 3½	3 11	3 8¼	3 2½
Mollendo	3 4	4 1½	3 9	3 4
Mangabeira (good)	2 2	2 6½	2 5	2 0
Peruvian slab	1 11	2 10½	2 10	1 10½
Peruvian ball and sausage	2 3	3 5½	3 5½	2 3½

New, fine Para rubber was quoted at New York from 66 to 69 cents per pound in 1893, 69 to 71 cents per pound in 1894, 73 to 77 cents in 1895, 74 to 88 cents in 1896, 80 to 87 cents in 1897, and 82 to 83 cents January 8, 1898.

The price of crude rubber at Para is shown by the March (this year) shipments of 3,489 tons, valued by the Brazilian Review of Rio de Janeiro at £1,395,000, or $6,696,000 gold, at the rate of $4.80 per pound sterling.

The Revista Agricola of São Paulo, dated April 15, has the following:

On February 23, the largest cargo ever known left Para for New York, consisting of 1,167 tons of rubber, valued (calculating exchange at 7d. and the pound sterling at $4.80) at $2,210,000 in United States gold. The same vessel, because of lack of space, was compelled to leave on the wharf 200 tons, valued at $308,000 in United States gold. The exportation of rubber from the country in 1898 amounted to £8,000,000, or $38,400,000 gold.

FRANK D. HILL,

SANTOS, *April 28, 1899.* *Consul.*

REFORMS IN THE COTTON TRADE.

There have been some misstatements in both American and English newspapers as to the adoption of new rules by the Liverpool Cotton Association. For a long time, there has been an agitation on the part of the association for a revision of the rules of the trade in the Lancashire district, many of the old rules being thought out of date and considered to interfere with the easy and natural course of trade, particularly with the United States, which produces most of the cotton handled here. It has, however, been found impossible for agreement to be reached on most of the points favored by the Liverpool Cotton Association, there being much opposition among the Manchester cotton men, and particularly on the part of the spinners of Lancashire. After a number of conferences and long consideration, the Liverpool association has decided to make only one of the proposed revisions obligatory—and that is a requirement that the weighing and invoicing of cotton shall be in pounds, instead of hundredweights, quarters, and pounds, as at present. This new rule is to go into effect on October 1. The association has also agreed to recognize the following optional rules: (1) That the allowance for tare on American cotton shall be 4 pounds per 100 pounds, instead of 112 pounds, and that the allowance for "double draft" be abolished; (2) that the allowance of 1½ per cent in invoices be abolished.

The prospect is that with the first arrivals of the new season's crop in October, there will commence an active competition in this market between the new and the old systems of baling. Up to within the last few months there was but small interest taken here in the new systems of baling, although the present system is universally condemned as being wasteful and antiquated. The cotton men of this market, while expressing disgust at the present system, have not felt called upon to take any active steps in the direction of reform. They are all on an equal footing, and by insurance and by the customs of the trade they protect themselves against financial loss arising from the present defective and wasteful system of baling. Indeed, middlemen actually make a profit out of the imperfections and wastes of the present system. Of course, somebody ultimately has to pay for these gains made by those who handle the cotton here as intermediaries. The bulk of the loss caused by the present system undoubtedly falls in the end on the original producers of the cotton in America, and most of the remainder of the final loss falls on the spinners.

During the past two years, there have been a number of different systems for the baling of cotton presented before the Liverpool trade, all of them being of American invention. Eighteen months ago the cylindrical "roll" bale, introduced by the American Cotton Company, attracted some attention here. A few small shipments were made, but no more was heard of the bale in this market. One sample of the "Churchill" square bale was sent here about six months ago. This bale is of greater density than the ordinary square bale and is held together by wire instead of steel bands. It was highly commended here and was thought to be equal to the Egyptian system of baling, but no more has been heard of the Churchill bale. Since then, information has come of another square bale, manufactured by the American Cotton-Baling Company, of Providence, R. I. By this system the cotton is tightly compressed and is incased by thin steel sheets, fastened together by metallic strips. There is great curiosity as to this bale. It is conceded that the cotton will be preserved in excellent condition, but the seeming difficulty of sampling is urged against the bale. It is said that shipments under this system will be made at the commencement of the next cotton season.

The most thorough and energetic attempts that have yet been made to introduce into the Liverpool market an improved system of baling is that now being made by the Planters' Compress Company, owners of the "Lowry" system of cylindrical baling, already described in CONSULAR REPORTS No. 219 (December, 1898). I find a marked change of opinion in regard to this bale since the above report was written. The two chief objections urged against it were

that it could not be sampled, and that the cotton around the core was hard to a degree which made it difficult for the spinner to work. It now seems that the matter of sampling is practically not so difficult as was at first thought. I have seen a Lowry bale go through a cotton mill. The superintendent was enthusiastic, not only as to the clean condition of the cotton, but as to the facility with which it went through the mill. The hardness of the cotton at the center of each disk disappeared in the second "breaking," and the superintendent said that one great advantage this cylindrically baled cotton had over the old-style square-baled cotton was that the fiber ran in one direction in the former, thus greatly facilitating the spinning. The superintendent also claimed that the spinner got more net cotton by the new cylindrical bale than by the old square bale, there being no loss represented by the absorption of dampness as in the old bale, nor loss by dirt in the cotton, nor did he have to pay for bagging patched on by those from whom he bought the cotton. So far there have been only a few thousand bales shipped here, but those that have come have found ready sale. A number of dealers here have expressed their intention of handling the Lowry bale next season, it being understood that arrangements have been made for fully meeting the expected demand. Whether the Lowry bale is a solution of the problem, and whether it is destined to supplant the present system, are questions which the opinion of the trade here, with characteristic conservatism, is not yet prepared to answer; but it is altogether likely that there will be, with the incoming of the new crop, an improvement in the baling of American cotton.

JAMES BOYLE,
Consul.

LIVERPOOL, *June 20, 1899.*

THE EDUCATION OF GERMAN CONSULS.

No attentive reader of current newspaper discussion in Germany can have failed to notice the earnestness and intelligence with which the leading journals have seconded the plans which are now understood to be under consideration by the Imperial Government for the reorganization of its consular service.

The scope and purpose of the proposed reform have been dictated by the new and enlarged functions which are imposed upon the foreign service of Germany, by the expansion of her foreign trade and by the valiant fight which this country is preparing to make for a leading and permanent place in all important foreign markets.

As long as Germany was an agricultural State, without colonies

or any large export trade, except in manufactured products which went mainly to the United States and neighboring countries in Europe, her consular service organized on the old lines served satisfactorily for the protection of German subjects residing abroad and such other incidental duties as might be required of it. Under that system, consuls were educated as lawyers and diplomats, passed the prescribed assessor's examination, underwent a period of training in the Foreign Office, and became typical Prussian officials, with a good command of languages, a fair knowledge of diplomacy, international law, and the history of treaties, but no practical acquaintance with industrial processes, commercial values, or mercantile usages. As trained officials belonging to the privileged class, many of the imperial consuls and their subordinates—as is now asserted by the German press—have evinced a certain contempt for trade and those engaged in it, and have rejected requests for commercial aid and information as forming no part of their official duties.

The exigencies of the wholly new situation that has been developed during the past ten years—stimulated, as is broadly hinted, by the recognized efficiency of American and other consuls in obtaining valuable information and promoting export trade—have created a demand for a radical reform of the entire consular system and its reorganization upon wholly different lines.

In so far as the leading newspapers are informed, the propositions now under consideration are two:

First. To retain practically the present consular organization, and to strengthen the commercial efficiency of the consulates by assigning to them commercial attachés—a plan that has been found to work well in the German consulates in the United States.

Second. To abolish permanent consuls (Berufsconsuln) and appoint in their stead experienced and capable merchants, who will give to the consular office a definite commercial character, while its legal and purely official duties are performed by young attachés trained in the usual manner.

Whichever of the plans may be adopted, there is a general demand that the consular service shall remain, as now, a life career; that the basis of its personnel shall be a corps of consular pupils, selected by competitive examination for their intelligence, energy, and efficiency as students of modern languages, commercial law, and technology, trained by special studies for their career, and then sent out to foreign parts to begin their life work as apprentices. For the purposes of this service, the world will be divided into four or five districts, for each of which the consular pupil will be specially educated in all that relates to languages, history, and special commercial conditions. In such a division, Great Britain and its English-speaking colonies

would constitute one district, the United States a second, South America a third, China and Japan a fourth, the East Indies a fifth; and the consular pupil, prepared and assigned to one of these, would remain there during his career, thus saving the reckless waste of valuable knowledge and experience that occurs where a competent consular officer, familiar with the language and commercial uses of one foreign country, is suddenly transferred to another.

To emphasize the need of a radical reform on this point—in respect to which the proposed new German system would be a step beyond what has been hitherto embodied in the consular service of any other government—the Cologne Gazette says:

> The essential condition to the practical success of this reform will be a radical change in the plan by which our consuls are assigned to duty. Hitherto, the whole world has constituted for our foreign service but one district. A consular officer now begins his career at Pekin and during his two or three years' service there learns the language and begins to feel at home. Just as he becomes of real value to the consulate, his experience and attainments are wasted by a transfer to Buenos Ayres. What he learned in China is now lost and worthless. But he begins zealously the study of Argentine conditions and the Spanish language. At the end of three years, he is so far advanced that he has practical command of his district, when he is transferred to the consulate at Odessa. There he has to forget his Spanish, just as he forgot his knowledge of Chinese at Buenos Ayres. He now works three years more to learn the language and commercial conditions of Russia, when he is promoted to consul-general and transferred to, say, Palermo. Chinese, Spanish, Russian, and all the peculiarities of those countries which he had laboriously acquired, and which would have been so valuable at either of his former posts of duty, are now lost and worthless capital, and he is naturally too discouraged and indifferent to begin the study of Italian and the peculiar conditions in that country, because he knows that sooner or later he will be transferred—perhaps to Chicago—where his Italian would again become useless.

This is, of course, an extreme picture, but it shows what has been a serious weakness in the bureaucratic system of consular administration and shows how fully the German press at least realizes what governments have been so slow to learn, viz, that the higher, more valuable work of a consul requires special attainments and capabilities, not only in different countries, but often in different districts of the same country; that given intelligence, industry, and patriotic devotion to duty, the practical value of a consul to his country and people increases with each year that he remains at a given post for which he has been prepared by proper antecedent education; that the system of transfers with each advancement in grade or fixed period of service is only less wasteful and ill considered than the plan of filling important consulates with wholly inexperienced men who are in danger of removal before they have become competent through experience and practically acquired knowledge of their duties.

Whatever else may happen, this much may be recognized and

taken into future account: Germany has set herself to the task of remaining what she has become—one of the foremost manufacturing and exporting nations of the world. What she lacks in native materials and resources she will make up for by superior education, organization, energy, and mastery of details; and in the furtherance of this policy every energy of the Government and the people, from Emperor to operative, will be enlisted and exerted with a persisent, unswerving, patriotic purpose.

The consular service is to be made, like the great subsidized steamship lines, the effective agent of the Government for pushing the trade of German merchants into every corner of the civilized world; and it will be reorganized, trained, and equipped for its work with the same scientific thoroughness that characterizes the military, industrial, and educational systems of this country.

If present indications are fulfilled, the officialism which has heretofore restricted the usefulness of the German consular service will be sacrificed to practical utility. Young men, carefully selected and specially educated for service in a designated field, will go out and pass from clerk through the successive grades to consul-general in that one district, and as the final reward of competent, faithful service, will be recalled for duty in the Foreign Office, which will in time become a bureau of experts, whose aggregate knowledge will cover the whole realm of German export trade.

As has already happened in law, medicine, engineering—in nearly every field of applied science—the day of the all-round man, with a smattering of many things but a thorough knowledge of nothing, is definitely past, and the successes of the future will be won by the nations as well as by the individuals who can bring the highest attainments, the largest experience, and the most consummate proficiency to bear where competition is keenest and the richest prizes are to be won.

FRANK H. MASON,
Consul-General.

BERLIN, *May 13, 1899.*

GERMAN TOOL-MACHINE TRUST.

This association, which was formed in the spring of last year and comprises the majority of the works manufacturing tool machines in Germany, held its first annual meeting a short while ago in Düsseldorf, and reports for the year 1897 as follows:

Our supervisory committee has given the matter of tariff policy careful consideration, in order to be able to supply concise information to the German imperial authorities as to the productive capacity of this branch of manufacture. The declarations of the firms belonging to this trust, as well as of others outside of it, concerning the question of tariff policy have demonstrated the necessity of affording

stronger protection to this industrial branch. Stringent measures are especially required in the importation of American tool machines. It is also necessary to take steps to have transportation rates to, and the tariffs of, countries in eastern and northern Europe reduced, so as to stimulate the export of German machines. Investigations concerning this branch show that in 1897 there were employed in 208 tool-machine works (out of a total of 220 firms operating in Germany) over 26,000 hands, who received a little over 24,000,000 marks (about $5,700,000) in wages. The product of these 208 works was valued at 70,000,000 marks (almost $18,000,000), and about three-fourths of the machines produced were exported. This branch of industry is therefore important, and returns for 1898 will show further progress. Almost all the works engaged in making tool machines have undergone large extensions in the last year, and their output is consequently increased.

It will be noted that the trust asks for the putting down of customs barriers by other foreign countries and strenuously urges the putting up of such barriers against American imports, which latter are in reality the models of the German tool machines.

SIMON W. HANAUER,
FRANKFORT, *June 21, 1899.* *Vice-Consul-General.*

TRADE AND INDUSTRIES OF MANNHEIM.

Vice and Deputy Consul Osterhaus writes from Mannheim, June 12, 1899, in regard to harbor improvements and trade conditions at that port. He says:

An old channel of the Rhine, until now reserved to the timber trade, will hereafter be largely devoted to the wants of shipping.

The harbor is at the head of the regular navigation and connected with the great seaports of Rotterdam, Amsterdam, and Antwerp. Boats drawing 3 meters (9.8 feet) and carrying from 800 to upwards of 2,000 tons ply, almost the whole year, regularly and directly between Mannheim-Ludwigshafen and the above seaports. The bulk of all goods arriving or leaving by water or rail has to be transshipped here. The field of traffic comprises all southern Germany, Switzerland, northern Italy, and a part of Austria, as well as the highly cultivated regions bordering the Rhine to the north.

The arrivals and departures by water and rail, which in 1860 amounted to 460,000 tons, augmented in the year 1897 to 7,744,000 tons.

Imports in the year 1896 were: Breadstuffs, 758,000 tons; petroleum, 118,000 tons; wood (pitch pine), 59,000 tons. Of these articles, breadstuffs and petroleum are exclusively American productions, while a large portion of the wood was shipped by the Southern States.

The Mannheim importers of wheat paid, in the year 1897, customs amounting to $3,500,000.

Mannheim is a prominent petroleum market of the Continent. An extensive area of ground is devoted to this particular commerce. The installation follows the American system, so far as local circumstances admit. On the angle formed by the confluence of the rivers Neckar and Rhine, a number of tanks, with an aggregate capacity of 50,000,000 liters (13,000,000 gallons), has been erected; these hardly suffice to satisfy the increasing demand. River tank boats receive the oil directly from the ocean ships, ordinarily at Antwerp; after five to eight days they empty their contents into the tanks on shore, whence the oil is taken to the consumers far and near by railroads in truck tanks, and by wagons for the local dealers. The petroleum trade here, as in all western and northwestern regions of Germany, is controlled by the United States, which will enjoy a practical monopoly until transportation facilities with the competing countries (Russia, Galicia, etc.) are improved.

The area of Mannheim Harbor (not including Ludwigshafen) covers 220 hectares, or 450 acres. The length along the banks of the rivers and the inner basins amounts to almost 25 kilometers (15 miles).

On the wharves there are no less than one hundred steam and electric cranes.

The new addition to the harbor is 6.5 kilometers (4.038 miles) long and about 300 meters (984 feet) broad, and its banks are secured by levees and quays. It will be supplied with the required apparatus and have the necessary connections with all railways.

The arrival by water in one year of over 1,600,000 tons of coal (not including the considerable quantities shipped from the coal measures of the Saar district) shows the industrial importance of Mannheim and the surrounding region.

The capital of companies domiciled here, excluding Ludwigshafen, amounts to 214,723,718 marks ($53,500,000). The industries comprise works in iron, steel, copper, wood, cotton, wool, india rubber, etc. To the United States the chemical works, and among these the Badische Anilin-Soda Fabrik, are of special interest. There is hardly a country of the globe where the products of this establishment are not found. From the chemical works within this consular district, large quantities of goods are shipped to America. The exports of chemicals, drugs, aniline colors, and dyes amounted to $2,181,400 in 1898. Next in importance in the same time were the shipments of leather, $614,800; cement, $107,600; wood pulp, $67,200; and wines, $36,300.

The population of Mannheim numbered in 1870 not more than 40,000 inhabitants; it is now stated to be 125,395.

GERMAN TARIFF ON AGRICULTURAL MACHINES AND TOOLS.

In reply to special instructions of May 13 from the Department,* I have to report that the duty on agricultural implements, machines, and tools imported into Germany is specific and based upon the material of which the implement or machine is principally composed, modified again by the polish, painting, and finish, or outward decoration that has been applied.

These conditions, while theoretically simple, are in practice often exceedingly complicated, so that it is frequently impossible, even for an expert importer, to say positively what the duty on a new article will be until a sample has been imported and subjected to actual classification and appraisal by the customs officials.

In so far as the questions submitted by the Department can be answered from the imperial German tariff schedule, supplemented by the testimony of a leading importer of American machinery, such imports are classified for duty as follows, the rate given in marks, with equivalents in United States currency, being for 100 kilograms (220.46 pounds).

	Marks.
(*a*) Machines and parts of wood or cast iron or both	3=$0.71
(*b*) Machines and parts of wrought iron and steel or both	5= 1.19
(*c*) Machines and parts of other base metals or any other ordinary material	8= 1.90

In classifying machinery, the principle holds that where a machine is composed of several different materials belonging to two of the above groups or designations, the machine as a whole shall be assessed under the class to which the greatest weight of its materials belongs, viz, wood and cast iron at 3 marks, wrought iron and steel at 5 marks, and brass, zinc, copper, and all other base metals and ordinary materials at 8 marks per 100 kilograms.

Thus, if a machine weighing 100 kilograms contains 40 kilograms of brass and copper, 30 kilograms of wrought iron, and 30 kilograms of cast iron, it would be assessed for duty under class *c* at 8 marks ($1.90) per 100 kilograms. If, on the other hand, it contains wood and cast iron weighing together more than all the other materials, it would be assessed under class *a* at 3 marks per 100 kilograms. In all cases the rate of duty is governed by the polish or

* This report was requested in order to enable the Department to definitely answer inquiries in regard to the duties on these articles imported into Germany, no specific mention of them being made in the German tariff.

outward finish of an article, and in this respect the German tariff is peculiar and leads to some curious decisions. Thus the rating of a fire-proof safe is changed if, as is usual with safes of American manufacture, a picture is painted for decorative purposes on one of its panels. Thus, also, plows and other agricultural implements, if rough and unpainted, are dutiable at 6 marks; but if polished, varnished, or painted are assessed 10 marks ($2.38) per 100 kilograms. The duty on carriages is doubled when any portion of the vehicle is upholstered.

Tools of iron or steel alone or in combination with wood and not polished, varnished, or painted are dutiable as follows:

		Marks.	
(*a*) Rough, as anvils, shafting, etc	per 100 kilograms	3	=$0.71
(*b*) Finished, as axes, hatchets, and mechanics' tools	do	10	= 2.38
(*c*) Fine tools, polished and varnished	do	24	= 5.71

The following machinery imported from countries which enjoy by treaty with Germany the privileges of the most-favored nation* may be imported in detached parts and assembled or set up in this country, and in this condition pay duty according to the rate pertaining to the chief material of composition, that is, greatest aggregate weight in the entire machine, as above explained: Flouring-mill machinery, electrical, cotton-spinning and weaving, steam engines and boilers, paper-mill equipments, machine tools, turbines, woolen spinning and weaving, pumps, ventilators, blowing machinery, steam hammers and rollers, shearing, punching, and boring machines, etc.

FRANK H. MASON,
Consul-General.

BERLIN, *June 1, 1899.*

SUGGESTIONS FOR EXPORTERS TO GERMANY.

Almost daily, letters reach this consulate-general from United States manufacturers asking how to proceed to find a market in Germany, for addresses of German firms, or for local agents. Desiring to aid in the expansion of our country's trade, I give a great deal of my time to personal interviews with German dealers, etc., but my experience teaches me that these efforts to gain markets are, in the main, futile. The American manufacturers who have been successful in acquiring a large export trade to Europe are those who have sent agents from home to exploit and work the foreign fields. These agents should not only be familiar with the character, quality, and technical features of the products which they offer for sale, but they must have culture, business tact, and full command of the language

*Including the United States.

of the country in which they will operate. We have plenty of such young men who were born or educated in European countries; these are the proper pioneers to open a path for American exports. It is a mistake to send out persons who speak English only, or who are unacquainted with European customs, social as well as commercial.

In giving the agency of American goods to German firms or individuals, our manufacturers and exporters have no guaranty that their interests will be protected or properly pushed.

We hold yearly industrial exhibitions in our own country, each of which costs many millions of dollars. If this money were expended in holding expositions in foreign countries, the results would be more profitable to our business interests and would increase our export figures quickly and largely.

Each exposition should comprise only one leading line of goods and should be migratory, remaining in the most suitable center of each country for six months, and then moving to another. The ablest representatives of our trade should act as exhibitors, canvassers, and selling agents.

SIMON W. HANAUER,
Vice-Consul-General.

FRANKFORT, *June 12, 1899.*

GERMAN-AMERICAN BALANCE OF TRADE.

Mr. Fisk, second secretary of embassy at Berlin, under date of May 18, 1899, sends translation of an official memorandum as to the trade balance between Germany and the United States, as follows:

The estimates given by the Secretary of State of the Interior, Count von Posadowsky, in the session of the Reichstag of February 11 last, regarding the excess of the imports into Germany from the United States, as compared with the exports from Germany to the United States, has been stated by far too low, as, according to later investigations of the imperial statistical bureau, the amount has been 551,000,000 marks ($131,138,000) in favor of the United States.

Imports and exports.

Year.	Imports into Germany from the United States.		Exports from Germany to the United States.	
	Marks.		*Marks.*	
1897	657,000,000	$156,000,000	397,000,000	$94,000,000
1898	877,000,000	208,000,000	325,000,000	77,000,000
Increase	220,000,000	42,000,000	.....	.....
Decrease	.....	.....	72,000,000	17,000,000

The excess in favor of the United States increased from 260,000,000 marks ($61,880,000) in 1897 to about 551,000,000 marks ($131,138,000) in 1898, while during the fiscal year 1893 the exports from Germany to the United States were larger than the imports into Germany from the United States.

Never before has more been imported into Germany from the United States than in 1898, and only once during the last ten years has Germany exported less to that country than in 1898. According to United States statistics, the exports of the latter country to Germany for the year 1898 have exceeded the German exports to the United States by more than $86,000,000.

The difference of the two statistical estimates may, in a large degree, be explained by the fact that the importation of goods from the United States into Germany, especially southern Germany, come via the Netherlands and Belgium, and that the American statistics give the goods as coming from America only when they are sent by German ships to German harbors, or whenever the place of designation is made clear by the marking of the shipment, which, however, is rarely the case. The difference of the statistical results is thereby explained. Finally, the assumption seems justified that each country would be in the best position to establish the amount of goods it receives from foreign countries.

As regards the present increase of exportation of goods to the United States for the first quarter of 1899, this is due mainly to a larger exportation of sugar. The increase for the first quarter of 1899 amounts to $4,000,000 in round figures, and of this about 14,500,000 marks, or about $3,500,000, falls to sugar alone. As in 1898 only a minimum amount of sugar was sent from Germany to the United States, an increase in the exports for this year can not be surprising. In individual articles there is a decrease; in others a small increase. But even though it be presumed that the exports of Germany to the United States would increase during the following quarters, as has been the case during the first three months of 1899, German exports to the United States would nevertheless not reach the amount of 1897.

GERMANY'S FOREIGN INTERESTS.

Hitherto few have had anything like a definite idea of Germany's interests abroad. German economists are not exaggerating when they say this Empire's people and capital are operating in every part of the world. Not only Hamburg, Bremen, Stettin, Lübeck, and Kiel—*i. e.*, the seaport cities—but towns far inland, have invested millions in foreign enterprises. In the Americas, North and South, in Australia, in Asia, in a large part of Africa, German settlements, German factories, German merchants, and German industrial leaders are at work. Nor is it always in settlements under the Empire's control that this influence is strongest. In Senegambia, on the Gold Coast, the Slave Coast, in Zanzibar and Mozambique, in Australia, Samoa, the Marshall Islands, Tahiti, Sumatra, and South and Central America there are powerful commercial organizations aiding the Empire. From Vladivostock to Singapore, on the mainland of Asia, and in many of the world's most productive islands, the influence of German money and thrift is felt. In Central America and the West Indies, millions of German money are in the plantations; so, too, in the plantations along the Gold Coast. In Guatemala, Honduras, Mexico, the Dominican Republic, Cuba, Puerto Rico, Trinidad, Venezuela, Brazil, etc , German capital plays a very important part in

helping to develop the agricultural and in some cases the manufacturing and commercial interests. A consequence of this development is seen in the numerous banking institutions whose fields of operation show that German commerce is working more and more in foreign parts. These banks look after and aid foreign investment as well as the Empire's other commercial relations. They help the millions of Germans in all parts of the world to carry on trade relations, not only with the Fatherland, but with other countries.

These are the links in a long and very strong chain of gold uniting the colonies with the Mother Country. Quite recently, large quantities of German capital have been invested in various industries. The Empire's capital in United States railroads is put down at $180,000,000. In America, Germans have undertaken manufacturing. They have used German money to put up breweries, hat factories, spinning, weaving, and paper mills, tanneries, soap-boiling establishments, candle mills, dye houses, mineral-water works, iron foundries, machine shops, dynamite mills, etc. Many of these mills use German machinery, and not a few German help. The Liebig Company, the Chilean saltpeter mines, the Chilean and Peruvian metal mines, many of the mines of South Africa, etc., are in large part controlled by German money and German forces. Two hundred different kinds of foreign bonds or papers are on the Berlin, Hamburg, and Frankfort exchanges. Germany has rapidly risen to a very important place in the financial, industrial, and mercantile world. Will she keep it? Much will depend on her power to push herself forward on the sea. History has told no more eloquent tale than the one that records the progress of maritime powers. From Phœnicia and Carthage to England, Germany, France, and the United States is a long way; but every hour of it is luminous with the wonderful prosperity that awaits nations strong in their merchant and fighting marines. The Empire is eager to increase her fleet. Every effort known to intelligent leaders is being put forth to secure as large and efficient a navy as possible.

J. C. MONAGHAN,

CHEMNITZ, *April 24, 1899.* *Consul.*

GERMANY'S WOOL IMPORT.

A noteworthy change in favor of South American wool has taken place in German imports within the last few years. Whereas formerly wool from the English colonies, especially Australian wool, formed the main portion of German wool imports, the Argentine Republic has taken since 1897 first rank among the countries interested in supplying this market.

The German wool imports from Great Britain consist almost exclusively of Australian and Cape wool. According to official statistics, Germany imported in 1898 about 71,000 double cwts. (15,652,660 pounds) of Australian and Cape wool and about as much in 1897, against 970,000 double cwts. (213,846,200 pounds) in 1895. The wool imported from the Argentine Republic, including that from Belgium, which is mainly of Argentine origin, amounted to 927,000 double cwts. (204,366,420 pounds) in 1898, against 770,000 double cwts. (169,754,200 pounds) in 1897 and 750,000 double cwts. (165,345,000 pounds) in 1895. The falling off in the imports of British colonial wool is chiefly due to the decrease in the imports from Australia; the latter have, since 1895, gone down by one-third. A further decrease in the imports of wool from that country is to be expected during the next few years; for, according to a report from New South Wales, the prolonged drought has caused the colony a direct loss of about 20,000,000 sheep, and the whole production of Australian wool has, in a single year, gone down from 1,500,000 to 250,000 bales of wool.

LOUIS STERN,
Commercial Agent.

BAMBERG, *June 16, 1899.*

GERMAN EXPORTS OF SOAP AND PERFUMERY.

Among the articles of German manufacture of which exports are steadily growing are soap and perfumery. The value of toilet soap exported from Germany rose from $904,000 in 1897 to $999,600 in 1898, whereas in 1889 the German export in this line amounted to scarcely $475,000. The principal countries buying fine soap in the German market were:

Country.	1898.		1897.	
	Met. cent.	*Pounds.*	*Met. cent.*	*Pounds.*
England	10,141	2,235,685	8,726	1,923,784
Belgium	2,267	499,783	1,838	405,205
Switzerland	2,300	507,058	1,873	412,922
Netherlands	2,180	480,603	1,875	473,338
France	2,046	451,061	1,510	332,895

Russia, China, and the Dutch East Indies also receive considerable quantities of German fancy soap. A falling off is observable in the exports to the United States only, where this branch of manufacture has so largely developed in the course of the last few years as to compete with the German trade.

Germany's exports of perfumery amounted in 1898 to $2,118,000, being an increase of nearly $250,000 over those of 1897. Germany's

most important customers for this article are Belgium, Holland, Austria, Russia, British East Indies, China, the Dutch East Indies, and Australia. There has been an increase in 1898 in the exports of German perfumery to all these countries; only the exports to the United States and Switzerland show a falling off.

Considering that toilet-soap manufacturers in the United States should be able to buy their raw material considerably cheaper than their German competitors, that the American style of wrapping and putting up for sale is in most cases more tasteful than the German, and that, as I have been informed, the machinery of our large soap manufacturers is superior to any other, one would think that the American product ought to be able to gain a place in the European market.

LOUIS STERN,
Commercial Agent.

BAMBERG, *May 25, 1899.*

DUTY ON DRUGGISTS' SCALES IN GERMANY AND FRANCE.*

GERMANY.

In compliance with special instructions from the Department dated June 3, I have to report that the German import duty on scales and balances is specific, and is governed (1) by the material chiefly used in construction and (2) by the nature and degree of outward finish to which the whole or principal portions of such instruments have been subjected.

The classification is substantially as follows (the rate given in marks and dollars equivalents being the amount of duty assessed in each class per 100 kilograms—220.46 pounds avoirdupois):

	Marks.
I. Scales and balances of iron:	
(*a*) Rough, unpolished	6=$1.42
(*b*) Smooth finished	10= 2.38
II. Scales and balances of copper, brass, bronze, aluminium, pinchbeck, Britannia metal, German silver, or other similar alloy:	
(*a*) Not varnished or polished	30= 7.14
(*b*) Varnished or polished	60=14.28
(*c*) Fine, highly adjusted and delicate scales for scientific purposes are free.	
(*d*) Trays of scales and balances, when imported separately from other parts of the instrument, are dutiable—	
(*a*) If rough, unpolished	18= 4.28
(*b*) If polished or varnished	30= 7.14

* These reports were obtained in compliance with a request by a New York trade journal, which has received advance copies.

All druggists' scales used in Germany must be graduated to the metric system. Those in use at Berlin are practically all of polished brass or nickeled copper, varnished, except the inside of the trays, with a coating of lac to prevent oxidation. Such instruments are dutiable at 60 marks ($14.28) per 100 kilograms.

None of the dealers who have been consulted here have in stock any imported scales, their whole supply being of German manufacture. Druggists and apothecaries throughout Germany are under very close and strict surveillance, and their business is controlled in every detail by an elaborate statute, which is rigidly enforced by frequent inspections of each pharmacy by a designated official. At such inspection the scales and balances in use are carefully tested, and the influence of such a system would be to encourage, if not require, the use of scales and balances of German manufacture.

FRANK H. MASON,
Consul-General.

BERLIN, *June 19, 1899.*

FRANCE.

In answer to Department's instruction dated June 3, 1899, I have to report that druggists' scales, being considered and classified as "instruments of precision," are exempt from duty on entering France.

JOHN K. GOWDY,
Consul-General.

PARIS, *June 23, 1899.*

PUBLIC WAYS AND PARKS IN SILESIA.

The roads in Breslau are kept in good condition. In fact, what is said to be the finest promenade of Europe surrounds the old city, beside a stream of water known as the "Stadtgraben," the former fortification ditch, which has been beautifully improved and which is about 200 feet wide. This is supplied with water from the River Oder and is well stocked with fish, which are sold at auction by the city administration once a year and bring a good revenue, which is used to keep the promenade in repair.

The promenade is from 100 to 150 feet wide and about 12,000 feet long, and is well supplied with benches for seating purposes. The small parks of 400 to 1,000 feet square, through which the promenade runs, have flowers, fountains, etc. Numerous parks are scattered over the city. At intersections of streets small strips of

land, from 200 to 1,000 feet square, are planted with fine shade trees and provided with benches.

There are also other parks which the city has made from abandoned graveyards, the law being that when a graveyard is full and has not been used for the term of forty years for burying purposes, it becomes a public park.* As they are planted with all kinds of shade trees, the abandoned graveyards make splendid parks at once.

The turnpikes through the province of Silesia are about 100 feet wide. Three-fourths of the width are macadamized and one-fourth is natural dirt road. The roads are kept in a better condition than a good many macadamized streets that I have seen in the United States. A good reason for this is that the fellies and tires of the wheels are never less than 2 inches, and sometimes 8 inches, wide, and the gauge of all wagons, whether carriage, truck, or farm wagon, must be 1½ meters (4.92 feet). This law in regard to the width of the gauge and the tires of the wagons is strictly enforced. The fellies and tires of all farm wagons must be not less than 4 inches; of rock and heavy freight wagons, from 6 to 8 inches.

The roads are kept in order by men who have charge of certain sections, under the supervision of the roadmaster. The man who keeps his section of the road in the best order during the year receives commendation from the roadmaster for performance of faithful service, which testimonial is looked upon by the laborer as a great honor.

On each side of the public roads are pathways for foot passengers, which are kept in good condition. Along the inside of the footways and outside of the road are trees, planted about 30 feet apart; most of them are black, white, and red cherry trees, of a very fine quality, and plum trees, known in the United States as the blue egg plum. These trees not only give excellent shade, but also return considerable revenue to the treasury of the various counties, the fruit being sold at auction so much per tree for a term of five years, the buyer binding himself to keep the trees well trimmed and free from insects, and whitewash the same in spring up to the first limb.

Stones are placed along the roadside, to keep the hubs of wagons from damaging the trees. The law against defacing or damaging any tree or shrub on the public highways is strictly enforced. As soon as caterpillars make their appearance, they are burnt out with cotton balls saturated with coal oil.

There is no toll collected on any of the public roads, either for

* Hebrew graveyards are private property and can never be used for any other purpose, unless the city should extend any of its public ways through said graveyard. The portion taken for this purpose is condemned by a jury and the trustees are paid by the city.

vehicles or foot passengers, excepting when a new bridge is constructed. Then, a toll of 10 pfennigs (equal to 2.38 cents) per horse is collected, until the construction is paid for.

The roads and bridges are kept in repair by the county, which obtains revenue for this purpose from taxation of the realty adjoining the highway.

C. W. ERDMAN,
Consul.

BRESLAU, *May 31, 1899.*

SILESIAN WOOL.

The wool market in the province of Silesia has not only decreased in quantity during the last five years, but the quality has deteriorated. Breslau, the capital of the province of Silesia, is the chief market of Germany for all kinds of wool. The amount of wool offered for sale in Breslau during the year 1898 was as follows:

	Pounds.
Old fine to extra fine Silesian wool:	
Fleece washed	495,000
In the grease	275,000
Wool of sheep more or less crossed with Rambouillets, fleece washed and in the grease	825,000
Better quality of Posen wools, fleece washed and in the grease	550,000

In the year 1898, the prices for Silesian wools were as follows:

Kind of wool.	Price per 50 kilograms (110.23 pounds).	Percentage of yield after washing by machinery.
		Per cent.
Fleece-washed extra-fine "electoral"	$57.12 to $64.26	58 to 50
Fine wools	50.00 to 57.12	60 to 58
Middle fine	41.65 to 48.80	62 to 60
Middle	30.94 to 39.27	70 to 65
In the grease, fine to extra fine	13.09 to 16.66	25 to 18
Posen wools:		
Middle fine to fine (special quality)	30.94 to 42.84	65 to 60
In the grease	11.42 to 13.80	28 to 20

In 1897, the amount of wool offered for sale was 10 per cent less than in 1898, and in 1894 the quantity of wool was at least 50 per cent greater than in 1898, and the quality was better. On account of the importation of Australian and Buenos Ayres wools into this market since 1894, the price of wool has been very low; in fact, it was lower in 1894 than ever known before. For that reason the farmers, who had been raising the pure Silesian wool, imported English and Scotch rams, and the cross produced larger sheep for

meat purposes, but an inferior quality of wool in comparison to the pure old Silesian product, which is known for its soft, silky, and long fleece as one of the finest qualities of wool, and was sought after by the manufacturers of fine cloths, dress goods, and shawls. For the production of these goods, the manufacturers are now mixing the fine Silesian with wool imported from Sydney and Port Phillip, as the pure Silesian wool is too high and scarce.

C. W. ERDMAN,

BRESLAU, *May 3, 1899.* *Consul.*

LOCOMOTIVES IN GERMANY.

Germany has eighteen factories, turning out locomotives both for home and foreign use. Fifteen of these build both large and small engines, and three build nothing but small ones for light work. These factories can furnish annually, under normal conditions, 1,400 engines. They employ from 15,000 to 20,000 workmen—the number depending upon the orders. Germany exports locomotives to Russia, Sweden, Norway, Denmark, Turkey, South America, South Africa, and Asia. A house here sent nineteen a year or two ago to the Dutch East Indies.

Up to date, as far as can be found out, no United States engine has entered this Empire, although England has ordered a number. A writer, whom I quote freely, says that work can be more effectively done in the United States, because only a few well-tried forms of engines are made. "In consequence of this," he continues, "the parts are put up and kept in supplies by all parties acting as agents of such engine builders. This enables those buying American engines to replace broken or injured parts almost instantly." German writers say the firms in Europe could do the same in the time put down for delivery, etc., were it not for the fact that every railroad company—every engineer—wants a particular type. They go so far as to express preferences for different kinds of different parts, and every change of officials or engineers having charge of the purchase of locomotives or their parts brings change in the articles used. Consequently, Germany has found it impossible to keep a supply of parts. "This," says the writer referred to, "may keep Germans from overproduction, etc., but it has the disadvantage of delaying deliveries. An understanding among the builders of locomotives might lead to a system not only advantageous to the Empire, but useful to the exporters of locomotives. It would help to keep territory already captured in far-off lands and fit Germany to meet America's rapidly rising influence."

It is hardly necessary to say that American locomotive builders will do well to look these lines over. They have never had such a chance as now. All Asia, Africa, Australia, North and South America, many states of Europe, particularly Russia, offer markets which we are the only people fully equipped to supply.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *April 28, 1899.*

TRAMWAYS IN MILAN.*

The transit service in Milan is electrical. All the tram lines excepting three start from the Piazza del Duomo (the Cathedral square) and run either to the various railroad stations or through the gates to points beyond the city limits. The lines above excepted are one from the Central Railroad Station that runs past the Northern Railroad Station to the Porta Ticinese Station, another that encircles the city, and a third from Porta Volta to the Musocco Cemetery.

The line that encircles the city is divided into five sections, and the fare on each section is 10 centesimi (2 cents), or 50 centesimi (10 cents) for the round trip. The line that runs from the Central Railroad Station past the Northern Railroad Station to the Porta Ticinese Station is divided into two sections, and the fare on each section is 10 centesimi (2 cents); 20 centesimi (4 cents) for the whole trip. The fare on the line from Porta Volta to the Musocco Cemetery is 15 centesimi (3 cents). The fare on each of the lines starting from the Piazza del Duomo is 10 centesimi (2 cents). But for the benefit of the working and the poorer classes, the fare is 5 centesimi (1 cent) on each line from the Piazza del Duomo and on each section of the other lines before 8 a. m. in the summer and 9 a. m. in the winter.

The total development of track system owned by the commune is 66 miles. But, as some of the trams run over the same track for certain distances at various points, the actual length of track is 42 miles. The contract which the Società Generale Edison di Electtricità has with the municipality of Milan for the management of the city's tramways lasts for twenty years. The commune provided at its own expense the laying down of the tracks, which were transferred to the above society on the payment of 4,500 lire ($868.50) for each kilometer (0.62137 mile, or 3,280 feet 10 inches) of single track.

The commune pays to the above society 25½ centesimi (5.1 cents) for each car per kilometer. From the total yearly receipts are de-

*This report was made in answer to inquiries by a Chicago company, to which Advance Sheets have been sent.

ducted the amounts paid by the society to the commune and by the commune to the society, and the remainder is divided between the society and the commune in the proportion of 40 per cent to the former and 60 per cent to the latter.

The regulations permit of cars carrying more passengers than there are seats, but, to prevent overcrowding, the gates are often closed. Only one gate is opened on each car—which will seat about eighteen passengers—and this is always on the opposite side of the car from the parallel track; so there is no danger of stepping off in front of an approaching tram. There were 44,559,888 passengers carried in 1898, against 39,736,091 in 1897.

The tram service in Milan is excellent; the cars are run with care and skill, and, when it is possible, at a fair rate of speed. There are very few accidents, although there is a perfect network of tracks in the Piazza del Duomo, and many of the streets through which the trams run are very narrow. The conductors are polite and obliging.

W. JARVIS,

MILAN, *May 29, 1899.* *Consul.*

TRADE OF BELGIUM, FIRST FIVE MONTHS OF 1899.

I give below comparative tables of the imports and exports, customs duties, and navigation of this country for the first five months of the years 1899 and 1898.

Imports and exports.

Description.	1899.	1898.	Increase in 1899.	
				Per ct.
Imports	$159,790,490	$152,427,540	$7,362,950	5
Exports	128,342,491	125,478,564	2,863,927	2

Customs duties received (general total).

1899	$3,856,182
1898	3,640,956
Increase in 1899	215,226

Navigation.

Description.	1899.		1898.		Increase in 1899.			
	No	Tons.	No.	Tons.	No.		Tons.	
						Per ct.		*Per ct.*
Entered	3,432	3,471,541	3,345	3,352,995	87	3	118,546	4
Departed	3,358	3,385,217	3,312	3,329,584	46	1	55,633	2

Imports from the United States into Belgium, comparing the first five months of the years 1899, 1898, and 1897.

Articles.	First five months of—		
	1899.	1898.	1897.
Barley ..... pounds...	5,916,132	72,539,552	78,276,027
Bran ..... do.....	4,660,259	5,902,089	14,909,775
Buckwheat ..... do.....	4,724,554	3,243,627	6,762,500
Indian corn ..... do.....	196,471,504	255,658,115	197,745,709
Rye ..... do.....	9,581,729	54,839,786	17,260,718
Oats ..... do.....	2,889,986	12,758,873	22,251,927
Wheat, spelt, and meslin ..... do.....	428,139,096	238,584,415	89,765,430
Forage ..... do.....	3,787,154	3,983,313	4,872,660
Flour:			
Wheat ..... do.....	2,528,025	2,385,397	660,581
Barley, oats, corn, and buckwheat ..... do.....	294,730	385,903	745,445
Unclassified ..... do.....	17,708	.....	.....
Coffee ..... do.....	437,293	361,607	643,933
Cotton ..... do.....	23,269,429	41,958,564	25,430,323
Hops ..... do.....	96,274	.....	26
Malt ..... do.....	803,484	948,337	495,007
Raw animal substances, such as lard ..... do.....	8,264,632	13,485,763	6,428,551
Animal fat, not specified, fish oil ..... do.....	4,418,785	2,343,095	1,348,717
Raw animal substances, horsehair, shells, etc ..... value...	$52,127	$45,838	$74,641
Fruits:			
Prunes ..... pounds...	197,823	489,627	193,024
Dried, unclassified ..... value...	$45,051	$59,617	$51,232
Honey ..... pounds...	510,422	355,401	332,429
Wax ..... do.....	.....	.....	225,766
Meats:			
Salted or smoked ham, tongue, etc ..... do.....	11,495,309	19,323,061	13,871,285
Preserved ..... do.....	245,308	433,005	269,543
Raw mineral matter, unclassified, grease ..... do.....	340,903	994,901	735,262
Petroleum, refined ..... do.....	93,195,496	94,057,779	114,135,930
Rushes, bamboo, etc ..... value...	$117,720	$10,147	$2,947
Stones, unclassified ..... pounds...	16,208,942	32,201,847	17,708,264
Tar, asphalt, etc ..... do.....	25,171,239	32,621,320	25,708,942
Copper and nickel:			
Unworked ..... do.....	1,049,321	7,145,796	4,307,815
Worked ..... do.....	42,147	87,286	149,271
Iron:			
Cast ..... do.....	9,475,133	5,875,698	11,238,486
Wrought ..... do.....	254,688	176,028	.....
Old ..... do.....	21,605	468,109	34,171
Not specified ..... do.....	80,038	25,456	10,190
Lead ..... do.....	1,940,943	1,590,255	3,834
Steel in bars, sheets, wire, unspecified ..... do.....	177,294	121,897	6,067
Tools, machines of iron or steel, unclassified ..... do.....	148,430	64,376	68,880
Machines and machinery:			
Unclassified ..... do.....	8,170	30,655	145,960
In cast iron, unclassified ..... do.....	1,659,600	1,024,453	1,286,068
Bicycles and bicycle parts ..... value...	$22,285	$34,053	$46,871
Firearms ..... do.....	$2,680	$2,351	$1,477
Hemp ..... pounds...	1,478,380	225,502	574,122
Cordage ..... do.....	72,813	41,166	441
India rubber, manufactured ..... value...	$2,162	$1,773	$1,251
Hides, raw ..... pounds...	52,057	249,649	82,048
Leather, tanned ..... do.....	36,737	37,449	19,429
Furniture ..... value...	$7,996	$8,504	$1,659
Haberdashery and hardware:			
10 per cent duty ..... do.....	$645	$284	$566
15 per cent duty ..... do.....	$12,508	$8,002	$5,059

Imports from the United States into Belgium, etc.—Continued.

Articles.	First five months of—		
	1899.	1898.	1897.
Paper, not specified.....pounds...	303,167	649,607	6,340
Chemical products, unspecified, such as carbonic-acid gas, etc.....value...	$338,971	$223,284	$420,189
Dyes and colors, not specified.....pounds...	856,584	486,952	354,283
Drugs, unclassified, plants, roots, flowers, etc.....do.....	10,022,791	16,068,655	9,741,915
Drugs, glue.....do.....	1,984	77,108	8,362
Tobacco:			
Unmanufactured .....do.....	4,505,796	4,262,386	4,453,999
Smoking and snuff.....do.....	6,642	8,106	4,942
Cigars and cigarettes.....do.....	7,493	3,853	5,908
Vegetable oils, nonalimentary.....do.....	14,235,756	8,754,987	6,309,408
Vegetables and vegetable substances, unspecified...do.....	389,563	799,209	551,443
Grains .....do.....	2,029,971	898,154	609,461
Oil cakes .....do.....	65,613,172	58,774,025	67,965,236
Wood:			
Oak and walnut—			
Unsawn .....cubic meters*...	386	798	1,031
Split .....do.....	825	154	241
Sawn .....do.....	6,674	7,889	7,209
For building purposes, other than oak and walnut—			
Unsawn.....cubic meters...	766	510	1,178
Sawn, beams, etc.....do.....	1,887	2,654	652
Sawn .....do.....	27,050	24,097	15,878
Wrought .....value...	$5,487	$5,702	$3,378
Wood pulp.....pounds...	2,668,613	1,302,334	470,051
Horses .....number...	1,879	3,108	1,497
Wool.....pounds...	76,228	2,142	27,251
Raw mineral matter, unclassified, such as copper, lead, zinc, etc.....value...	$108,534	$66,338	$67,801
Works of art .....do.....	$5,961	$20,412	$255

* 1 cubic meter=35.316 cubic feet.

The figures furnished in the report of importations for the first four months of the year 1897* were given as 45,307,997 pounds. The quantity for that period should have been 17,695,971 pounds, the figures as given in the report of the Minister of Finance having been inverted. Undoubtedly, the 45,307,997 pounds were imported from France, and not from the United States, as therein stated.

GEO. F. LINCOLN,
Consul-General.

ANTWERP, *June 21, 1899.*

* See CONSULAR REPORTS No. 227 (August, 1899), p. 647.

AMERICAN FRUIT IN NORWAY.

The importations of fruit into Norway in the year 1897 were as follows:

Oranges and lemons	$205,000
Grapes	22,600
Apples and pears	18,490
Other green fruit	2,000
Dried fruits	233,370
Canned fruit	49,000
Nuts	66,660
Total	597,120

Only some $25,000 worth was imported from the United States, the balance coming principally from Germany, Holland, Denmark, and southern Europe; canned fruit came from France.

The import duty on fruit is as follows, per kilogram (2.2 pounds):

	Öre. Cents.
Oranges and lemons	2=0.0054
Grapes	2=0.0054
Apples and pears	12=0.032
Berries	12=0.032
Dried plums and currants	15=0.0402
Canned fruit	75=0.201

Reduction is made for the weight of outer packing or covering.

The imports of fruit in 1898 were larger than in 1897, for the reason that the summer was cold and native fruit a general failure in consequence.

This year is remarkable for its late spring. On the high ground in central Norway and in the north it is still much like winter. In many places, stock has had to be killed for want of food.

It will thus be seen that there is good reason to believe that the fruit crop in this country will again be a failure, and American shippers should make arrangements accordingly. I have seen very little, if any, high-grade American fruit in this market, and I am certain that much more would be consumed if the goods offered were of a better quality. American apples in barrels very often arrive in such poor condition that the importers suffer loss.

From Spain, apples come in shallow baskets, each holding about 1 bushel. This fruit is nearly always sound, and, although the quality is poor, it brings a good price. Apples in barrels get bruised and spoil. I believe it would pay to have first-class fruit wrapped

in paper and packed in shallow boxes or baskets. If the fruit is of good quality, the increase in price would be no objection.

Of the dried fruit imported to Norway, but little comes from America, and an effort should be made to increase the trade.

Among wholesale dealers in Christiania, I will name:

Bisgaard & Heen, Skippergaden 28.
Kosmopolit, Akersgaden 20.
Fr. Meyer, Kongens Gd. 8.
N. J. Nielsen, Lille Grändse Gd. 5.
M. Strand & Co., Storgaden 37.
Fr. Werring, Grev Wedels pl. 4.
Jensen & Co., Torvgaden 5.
Eremitage, Storthingsgaden 10.
Norsk Frugt Compagnie, Torvgaden 32.
A. Bergwitz & Co., övre Slotsgaden 12 b.

HENRY BORDEWICH,
CHRISTIANIA, *May 29, 1899.* *Consul.*

AMERICAN FRUIT IN THE NETHERLANDS.*

Reports relating to the prospects for the general fruit crop are not very promising. A short crop would probably raise the prices of Dutch fruits and high prices might, as they did last year, curtail the consumption, especially of apples.

The season for importing fruits from the United States commences about October or November. Evaporated fruits are most in demand here and bring better prices than dried fruits. The goods must be "wood dried," and a statement to that effect should be marked on the outside of the boxes and barrels. Many dealers here require also a certificate of inspection, setting forth that the goods are zinc free.

It is difficult to quote prices at present, as the season is over. There are, however, already offers in the market of prime evaporated ring-cut apples for fall shipments as follows: Boxes of 50 pounds net, 39 to 40 Dutch guilders ($15.60 to $16) per 100 kilograms (220 pounds), costs, insurance, and freight paid to Rotterdam.

It is of great importance that the quality of packages of each lot should not differ, and that top, center, and bottom layers should be identically the same.

Parties or corporations desirous of exporting fruits to the Netherlands could make consignments to a bank here—for instance, to the

*This report was made in answer to inquiries by the Oregon State Board of Horticulture. Advance Sheets have been sent the board.

Disconto Maatschappy—with the instruction to sell the goods on arrival through a commission merchant. (Messrs. Altona Bros., who kindly furnished me with this information, have stated to me that they would be willing to undertake the sale of the goods and would do their utmost to build up a regular business by selling American fruits at public auction in order to reach small buyers.)

Fancy apricots, primes, on the spot, packed in boxes of 25 pounds net, are offered at about 36 Dutch guilders ($14.40), import duty of 5 per cent paid, per 50 kilograms (110 pounds). New-crop fancy apricots, August or September shipments, are offered at 38 Dutch guilders ($15.20) per 50 kilograms (110 pounds).

S. LISTOE,

ROTTERDAM, *June 16, 1899.* *Consul.*

AMERICAN BARBER CHAIRS IN GERMANY.

More American barber chairs should find their way into Germany. In the large cities, shops of the first class possess many chairs of American make. In the provincial towns, a comfortable barber chair is rarely seen. The ordinary chair in Germany has a cane bottom with a wooden head rest.

In Germany, barbers shave customers to a certain extent in their own homes. Much time is spent each day in going from house to house. I think one reason may be the poor equipment of the shops.

The best way to introduce these chairs is for our manufacturers to secure membership in some one of our export associations which have established sample rooms in the large cities of Germany. The chairs should be put on exhibit, and I am sure some middleman would soon be found who would undertake the task of introducing them into the smaller towns and villages. I might further add that a few months' credit would greatly facilitate sales. Other barber supplies, such as razors, soaps, perfumed waters, mugs, brushes, etc., would, in my opinion, find a smaller market, as these articles are exported more or less from Germany to other countries.

ERNEST L. HARRIS,

EIBENSTOCK, *May 22, 1899.* *Consular Agent.*

PATENT MEDICINES IN PORTUGAL.

Minister Townsend transmits from Lisbon, under date of May 17, 1899, copy of the revised regulations for granting licenses for the sale of medicines of secret composition. The substance of the regulations is given below:

ARTICLE I. Any person desiring a license for the sale of a patent medicine must apply either in person or through the medium of an attorney to the Minister of the Interior, giving a circumstantial statement of the effect and utility of the medicine, together with a sample of the same, accompanied by the formula for its preparation, signed and sealed by the applicant or his attorney, and by an acknowledgment of the deposit of 75 milreis ($81.50) in the public treasury.

ART. II. These requirements having been complied with, a member of the consulting board of health shall be appointed to inspect and test the aforesaid medicine and the formula for its preparation.

ART. III. Said inspector shall, as early as possible, request the attendance of the applicant or his attorney on the day, hour, and place of examination. The operation of testing shall be conducted in such a manner as to preserve the secrecy of the formula.

ART. IV. The inventor or his attorney shall provide all ingredients, apparatus, or utensils necessary for compounding the medicine. The operation may be extended beyond one session should any unavoidable impediment arise or if the age or nature of the preparation so demand, in which event all articles connected with the examination shall be sealed with the private seal of the acting member of the board of health. If the impression of said seal shall not be found intact on the day of the second session, all operations previously begun shall be declared null and the examination shall be recommenced.

ART. V. The preparation obtained shall be placed in an appropriate receptacle, the mouth of which shall be secured by wax, signed and sealed by the inspector; also by the inventor or his attorney. Said receptacle shall be sent to the Minister of the Interior, with the formula of preparation and a confidential note declaring the circumstances of the examination.

ART. VI. The formula and preparation shall be confidentially submitted to the consulting board of public health, of which the inspector is a member. This board is empowered to grant the license, decide upon the selling price, manner of administration, and the doses, all of which it shall be obligatory to state on the label of the bottle; after which, the formula, properly sealed, together with the decision of the consulting board, will be filed in the archives of state and classified as an application for license.

ART. VII. The granting of a license shall be published in the official journal and the price in the official tariff of prices of medicines.

Clause I.—Licenses shall be personal and of limited duration; they may be renewed at the option of the board of health.

Clause II.—The minimum term for which a license may be granted shall be five years. The formula of the medicine shall be published in the official journal fifteen years after the grant.

Clause III.—License for the unexpired term of a patent medicine will be given to the heirs or executors, provided they prove their acquaintance with the formula and their ability to execute the same.

Clause IV.—Licensed medicines must be kept up to the original standard of purity. For the purpose of ascertaining whether there is any adulteration, the inspector shall have possession of the formula filed in the archives, together with the portion of medicine necessary for testing. Should any adulteration be proved, the license shall be declared null and void. All medicine of the same denomination shall be seized without relieving those guilty of the adulterations, whether venders or others, from their criminal responsibility.

ART. VIII. The amount of the deposit, pursuant to Article I, and likewise the secret formula, shall be returned to the applicant when a license is refused.

ART IX. The stipulations laid down in the preceding articles are applicable to the importers of patent medicines not yet included in the list of medicines as dutiable, with this difference, that the license shall not be personal, but granted for the medicine.

ART. X. Patent medicines which have obtained the approval of various foreign academies of medicine, authenticated by the Portuguese chargé d'affaires in the different countries, may, with the approval of the board of health, be admitted into the Kingdom by complying with the formalities of Article I.

ART. XI. Infractions of these regulations shall be punished as acts of disobedience, when they are not liable to other penalties according to general laws. Proprietors of establishments where the medicine is offered for sale and persons selling it shall always be held responsible for the violation of the final clause of Article VII.

ART. XII. On a petition from the parties concerned, the respective provisions may be applied to the requisitions for licenses pending at the date of this resolution, without its being necessary to increase the deposit made pursuant to the decree of April 13, 1893.

ART. XIII. The regulation of April 13, 1893, is hereby amended and superseded.

BANKING AND RAILWAY STATISTICS OF IRELAND, 1898.

Banks.—An analysis of the banking and railway statistics of Ireland for 1898 shows that the amount of deposits and cash balances in the various banks in Ireland on December 31, 1898, was $238,156,777, being an increase, as compared with 1897, of $3,387,084. The total amount was made up of $191,925,027 in the joint-stock banks, $35,160,462 in the post-office savings banks, and $11,071,288 in the trustees' savings bank. These figures, respectively, show the following increases as compared with 1897: $671,577, $2,525,714, and $189,793. It is interesting to note in this connection that not only was the total amount in the banks the largest ever recorded, but that in each class of banks the deposits were the largest on record. The average bank-note circulation at the close of 1898 was $31,150,466, a decrease of $3,260,533 as compared with 1897.

Railways.—There were 2,988 miles of railway open in Ireland at the close of 1898, the earnings of which were $16,979,597, an increase over 1897 of $228,929, or 1.4 per cent.

The local financial papers seem to consider the above figures

evidence of a very satisfactory condition of affairs as regards the resources at the command of the people and of an increased capacity to save a portion of their earnings. While this may be partly true, I believe that these increased deposits in the banks, drawing little or no interest, are due to some extent to distrust in many of the businesses in which the people formerly invested, and partly to the high price of really sound securities and the consequent small dividends on money invested.

A. DONN PIATT,
Acting Consul.

DUBLIN, *May 2, 1899.*

MERCHANTS IN ATHENS.

Under date of June 3, 1899, Consul McGinley, of Athens, writes to a New York correspondent* as follows:

There are in Athens five dealers in bicycles and bicycle "fittings" and fifteen shops which repair bicycles.

There is no establishment in the city that keeps printing machinery in stock or that makes a specialty of that line; but some fifteen individuals and firms import such machinery and supplies to order, mostly from England and Germany. Athens has over one hundred and thirty-five printing houses, about two-thirds of which do lithographic work; and it has fifty bookbinderies.

The city contains one large furniture factory, which is operated by the inmates of an orphan boys' asylum, besides which there are about one hundred and fifty carpenter and joiner shops that make or repair office and house furniture; but only twenty make good furniture.

Athens has twenty good stationery stores, some of which carry very large stocks; all deal in office supplies and some in school supplies.

The city contains about forty-five hardware stores that deal in stoves, all of which burn either wood, coal, or coke, and nearly all of which are imported from other countries of Europe. The company that has the monopoly of the gas lighting in Athens alone sells gas stoves for cooking or heating purposes.

As there is no printed directory of any kind in Athens, the information and addresses herein contained were gathered through personal inquiries and search.

The leading firms in each line of business mentioned are:

Bicycle dealers.—Edward Hogg, St. George's street; J. Spanos, Vouli square; J. Papadopoulos, Colocotroni street.

* To whom Advance Sheets have been forwarded.

Stationery stores.—Pallis & Cotzias, Hermes street; D. K. Kokinakis, Aiolus street; Racopoulos Bros., Aiolus street.

Printing offices.—Ethniki Typographia (Government concern), Stadium street; J. Nicolaides, 42 Praxiteles street; Lucas Vergenites, 27 Praxiteles street; A. Tremis, 7 Praxiteles street; Dionisios Efstration, 5 Praxiteles street.

Lithographers.—B. Papachrisantou, Nomismaticopion street; K. Groodman, Deca street.

Bookbinders.—Nicolas Carides, 15 Praxiteles street; Christos Woozoonaras, University street; Marigo Nicolaou, 16 Praxiteles street; Erangelos Barberopoulos, Aristides street.

Furniture manufacturers.—Orphan Boys' Asylum, Piræus street; Christos Heliopoulos, Dionias street; Valentious Stankesser, Miltiades street; J. Maigassis, Academy street.

PLATINUM, IRIDIUM, AND OSMIUM IN FOREIGN COUNTRIES.

In compliance with the request of a mining engineer of Baltimore,* a Department instruction was sent, under date of July 14, 1898, to certain consular officers in Canada and South America, inquiring as to the occurrence and output of platinum, iridium, and osmium in those countries. Publication of the series has been delayed on account of the nonarrival of reports from some of the offices. Those that have been received are given below.

CANADA.

QUEBEC.

Consul Henry sends, under date of July 26, 1898, a letter from the inspector of mines at Quebec, as follows:

Platinum and iridosmine have been found in the black sand accompanying gold in the alluvions of the River du Loup, Beauce County, said district being well known as a gold alluvial country. The quantities of platinum and iridosmine are so small that they are of no value, except at a mineralogical view. The only reference to that subject made by the geological survey will be found in the Geology of Canada, pages 520 and 741. Some years ago, a gentleman who was said to be representing Mr. Edison made a personal inquiry through the country, but I understand he did not find the indication of any value for his purpose.

* To whom Advance Sheets have been sent.

SHERBROOKE.

Consul Lang, under date of August 4, 1898, transmits the following letter from a resident of St. Francis, Beauce County, Quebec:

I have made inquiries regarding deposits of iridium, osmium, and platinum, and find that no person here knows of such deposits.

Members of geological surveys have probably mentioned such metals in their mining reports of this region, but I am pretty certain they have never seen any.

The only metal we have here is gold, with very little iron sand.

VANCOUVER.

Under date of August 27, 1898, Consul Dudley writes:

Upon receipt of the Department's instruction, I addressed a letter to the honorable commissioner of mines for this Province, and he sent me a statement of the output of platinum since 1888, given below. I have made diligent inquiry from other sources and learn that it is generally believed that there are considerable deposits of platinum at several points in this Province, especially in the Similkameen division of the Yale district. I am told that large quantities of platinum have been found in the eastern portion of British Columbia, between Calgary, on the line of the Canadian Pacific Railway, and Edmonton, in the Northwest Territory.

I do not learn that platinum has been discovered to any extent in the valley of the Fraser River.

One of the best mining engineers here said to me that platinum, osmium, and associated minerals were found wherever there were placer deposits of gold. This gentleman also stated as his opinion that there was a considerable quantity of platinum and associated minerals in the placer-mining districts in Alaska and the British Northwest Territory. He believes that much platinum is thrown away by the miners in the placer districts, for the reason that the miners working for gold do not recognize the other mineral of almost equal value.

Considerable search is now being made for platinum by men of experience.

The deposits on the Fraser River near Lillooet and on the Tranquillo River have not yet yielded largely; but the belief is general here that good amounts may be obtained if proper efforts for its production are made.

The minister of mines refers me to a book published by Dr. Dawson, entitled Mineral Wealth of British Columbia, as containing all available information.

*Output of platinum since 1888.**

Year.	Quantity.	Value.
	Ounces.	
1888	1,500	$5,250
1889	1,000	3,500
1890		4,500
1891		10,000
1892		3,500
1893		1,800
1894		950 *
1895		3,800
1896		750
1897		1,600

BRAZIL.

Consul Furniss, of Bahia, under date of September 3, 1898, says that he has thoroughly investigated the matter, and can not find that any of the metals named are found in his district.

COLOMBIA.

Consul-General McNally, of Bogotá, on August 23, 1898, writes that the fund of information touching the matter referred to is of necessity very meager in that country, by reason of the lack of statistics, making it compulsory to seek information from private sources, which are more or less unreliable.

The Choco district, he adds, in which the minerals may be found, is remote from Bogotá and difficult of access, on account of poor transportation facilities.

HISTORY OF THE NAPHTHA INDUSTRY IN RUSSIA.

Two very serious crises in this branch of the mining industry were averted by the influx of foreign capital. In 1873 and 1874, the existing system of monopolies was altered by leasing the naphtha lands. Russian promoters spent considerable amounts for the leases, but in the long run there was such a deficiency of working capital that even the largest undertakings were in danger of liquidation.

The Swedish capitalist Mr. Robert Nobel, who arrived in Russia about that time, recognized the large profits to be obtained from the

* Most of this comes from the Similkameen division of Yale district.

naphtha business and started an immense undertaking. The crisis in 1877 did not have any serious results, thanks to the capital of Nobel, who, by loans, saved the naphtha-industry promoters connected with him in business from bankruptcy.

In 1883, a large naphtha undertaking, "Bnito," was organized, excellently managed both technically and commercially, but this also experienced a deficiency of capital. The principal founders of the concern became bankrupt. The Paris firm of Messrs. Rothschild went into the matter, bought up a considerable part of the shares, and opened a credit to the Baku manufacturers of 2,000,000 rubles ($1,000,000) at 6 per cent annually, on condition that all the material intended for export should be made over to them for sale in the foreign markets. In this way, the expected crisis was averted.

The foreign promoters further cooperated in the progress of the naphtha industry by the construction of a pipe line, the adoption of cistern wagons, distillery boilers, and other technical improvements. Good results are expected from the influx of English capital at the present time. In 1896 and 1898, about 18,000,000 rubles ($9,000,000) were invested, and thus 4.6 per cent of the naphtha-producing area of Baku belongs to the English. Their profits amount to 17 per cent of the whole proceeds. Of the 6,000 dessiatines (14,200 acres) of naphtha-producing ground, only 500, or about 8 per cent, are actually worked.

THOMAS SMITH,
Consul.

MOSCOW, *June 13, 1899.*

NAVIGATION OF THE RIVER VOLGA.

The Ministry of Railways and Communications is at present contemplating the improvement of navigation on the River Volga and its tributaries. Engineer Poletaeff, who made researches on the River Kiatka during 1878 and who is now constructing a dam on the River Petroffsk, expresses the opinion that no matter how much the Volga is dredged, it will be impossible to free it from the sand which accumulates in its broad shallows. The banks will always drift during the spring, when the ice breaks up and the current is strong, and dredging and sifting work would only be a useless and never-ending expense.

Engineer Poletaeff proposes to pass the bars on the right and left side by making canals of ordinary width about 6 fathoms deep on both sides of the river. Presuming the total length of these bars to be 400 versts, or 266 miles, the cost of these canals will not exceed 20,000,000 rubles ($10,000,000). To prevent the formation of

further bars by the widening of the river bed, it would be indispensable to plant willows on the banks, which, according to an approximate calculation, reckoning the height of the embankments at 2 fathoms, would not cost more than 12,000,000 rubles ($6,000,000). The cost of the whole undertaking would not exceed 41,600,000 rubles ($20,800,000), and Engineer Poletaeff undertakes to accomplish it within ten years.

THOMAS SMITH,
Consul.

MOSCOW, *June 13, 1899.*

TRADE OPENINGS IN RUSSIA.

The last pamphlet (June, 1899) published by the Chamber of Commerce at Frankfort contains the following:

NEW RUSSIAN MONTHLY MAGAZINE FOR TRADE AND INDUSTRY.

For the purpose of fostering German trade relations with Russia, an illustrated monthly publication has just been founded in St. Petersburg, to bring to the attention of Russian merchants and consumers the names of German sources of supply and manufacturing firms. This enterprise promises to be advantageous to the German export trade, and is especially opportune, because a monthly magazine—the Russian-English Messenger—has been published in Moscow in the interest of English trade since November, 1898.

For the last five years, our National Association of Manufacturers in the United States and other trade associations, steamship and transportation lines have directed their efforts towards increasing our trade with Latin America. While I indorse all attempts to increase our exports, I believe that an equal amount of money, time, and energy expended upon furthering our trade relations with the great Russian Empire would prove more profitable.

Russia has not only an immensely larger population than Latin America, thus affording us a wider market, but the vast Empire offers the best and most profitable field for our promoters of railway, electric, and other enterprises, for the construction of waterworks and drainage systems, building streets and canals, works in iron, making dry docks and harbors, and opening mines. Americans have the most favorable chances to employ their capital and skill in Russia, as the people of that country are rather jealous of Europeans who figure in the rôle of pioneers, whereas they have no fear of American assistance in developing the resources of their country.

I would recommend my countrymen to "go east" and employ their talent, time, money, and energy in Russia, which will return them ample compensation.

SIMON W. HANAUER,
Vice-Consul-General.

FRANKFORT, *June 20, 1899.*

LEGAL STATUS OF FOREIGN CORPORATIONS IN RUSSIA.

I send herewith a translation of a brochure compiled by Mr. Joseph Pergamainte, a lawyer of Odessa, upon the status of foreign corporations in Russia. It will be of considerable value to manufacturing companies in the United States who may be engaged in the Russian trade and also to business men who contemplate putting money in Russian projects.

Millions of dollars have been invested within the past few years in industrial and mining enterprises in Russia, chiefly by the French and Belgians. The Germans are also represented.

THOS. E. HEENAN,

ODESSA, *February 10, 1899.** *Consul.*

FOREIGN CORPORATIONS IN RUSSIA.

In view of the capacity of stock companies, or anonymous associations, for attracting large capital, they seem destined to play a most important part in develping the latent industry and commerce of modern times. As a natural consequence, the question presents itself of their legal status in foreign countries and the means afforded them to protect their interests in courts of law.

A résumé of their status in Russia and of the laws in force affecting them is given below.

A "foreign company," in the sense of the Russian code, is a company whose center of activity is abroad or whose board of directors or council of administration resides abroad. Consequently, if Russian subjects, in view of escaping the difficulties incident to the establishment of a company in Russia, should organize a company abroad and then return to Russia to engage actively in business, such a company would not be considered a "foreign company." Moreover, by virtue of article 1529 of the civil code,† it would not be considered as having any legal status, and in consequence could not plead in a court of law. Nor are those companies considered foreign which, although founded by aliens, have for their object the exploitation of Russian forests, coal or iron mines, etc., for these societies must be founded according to Russian laws and thus become Russian companies, even if their capital and board of directors are foreign. But a company whose council of administration resides abroad and which has only branch offices for local operations is considered a foreign company. Hence it is this class of corporations which will form the subject of this sketch.

According to the general principles of private international rights, the fact of the legal constitution of a corporation in its own country would seem to make it capable of acting in all countries; and this would seem to be in accordance with article 464 of the Russian civil code of procedure and article 242 of the commercial

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* Publication of this report has been delayed because of its length and the fact that it contained many details which were of no special interest to manufacturers or exporters in the United States. It has been summarized in the Bureau of Foreign Commerce.

† The civil code forms the first part of volume 10 of Svod Zakonow of the Empire.

code;* by virtue of which all acts duly legalized abroad are lawful and valid in Russia, even if they do not conform to Russian laws.† But such is not the case in Russia. The question is complicated by the fact that the organization of such commercial companies still depends, in certain countries, on the sanction of the government, whereas other countries allow a freedom of organization conditioned only upon the observation of certain legal formalities and prescriptions. In those countries where the sanction of the government is required, the business capacity of foreign companies is, as a general rule, not recognized. This is the case in Russia. To support this solution, it is argued that the authorization of the government constitutes a guaranty for the public good, which can not be made dependent on foreign administration, nor can it be made to suffer from it; and it would be strange indeed to accord rights to foreigners which Russian subjects can not enjoy. Hence, if foreign societies desire legal recognition in Russia, they can obtain it only by virtue of special international conventions, treaties, or declarations concluded between Russia and the governments under whose laws they are incorporated. Therefore, no company organized in a country with which Russia has no special treaty or convention has any legal rights in Russia. This has been affirmed by the supreme court.‡

In regard to the status of those companies whose governments have made special treaties with Russia, two questions arise:

(1) Concerning their right to plead in a Russian court of justice.

(2) Concerning their right to practise their trade or industry in Russia.

It will hereafter appear that no corporation can do business in Russia until it has complied with certain general conditions prescribed by the Russian Government, so that no foreign company can claim a right to operate in Russia merely by virtue of treaty stipulations.

(1) According to the terms of article 2139 of the Russian civil laws, the French companies and other commercial, industrial, and financial associations founded in France and called limited companies can enjoy their full rights in Russia, including that of pleading in a court of justice, upon the condition that they conform to all the laws of the Empire. Stock companies and other commercial, industrial, and financial associations founded in Belgium, with the permission of the Government of that country, can enjoy their full rights in Russia, including the right of pleading in courts of justice, provided they conform to all the laws of the Empire, and provided that similar companies founded in Russia are admitted to enjoy the same rights in Belgium. The ministers of Foreign Affairs and Finances have the right to conclude identical conventions with other foreign powers, without being obliged to obtain permission each time from the Council of State.

The law just quoted is based upon the decisions of the Council of State and sanctioned by His Majesty the Emperor on the 9th of September, 1863, and on the 18th of November, 1865. The first of these decisions refers to the French and the second to the Belgian companies, both having established conditions of reciprocity.

By virtue of the decision of November 18, 1865, conventions have also been concluded by Russia with Italy, Austria, Germany, Greece, and Bulgaria, reciprocity being one of the conditions.

Since by the Russian laws applicable to the creation of corporations or other commercial companies,§ no anonymous society or stock company may be created

* Second part of volume 11 of the Svod Zakonow.

† It is only necessary for the legation or consulate to certify to the fact that the act is in conformity with the laws of the country.

‡ Order of the Cour de Cassation of 1883, No. 44.

§ Svod Zakonow, volume 10, part 1, articles 2139–2198.

nor carry on its operations in Russia without an authorization of the supreme power and without a previous examination of its statutes by the competent ministry and by the Committee of Ministers or the Imperial Council, no anonymous society or stock company legally constituted abroad can exercise its operations in Russia without submitting to the regulations prescribed for similar Russian societies and companies.

Owing to the differences in the text of the various treaties which have been concluded, there was some controversy in former years in regard to the specific privileges conferred by such treaties upon the various companies. To eliminate all misunderstandings, the law of November 9, 1887, declares that foreign companies shall be able to begin their operations in Russia only after they shall have obtained special permission from the Council of Ministers or the Imperial Council of State, and upon the condition that they conform to certain prescriptions or ordinances, the nature of which varies according to the kind of business which these companies propose to undertake.

Therefore, companies which are organized under the laws of Germany, Austria, Belgium, France, Greece, Italy, and Bulgaria are the only ones which have the actual right to plead in Russian courts of justice, and these companies must be established according to the laws of their respective countries. Contracts made in Russia with parties having the right of access to tribunals will be judged according to Russian laws; but questions of internal administration and conflicts between Russian shareholders and the foreign company will be judged by the Russian courts according to the laws of the country whence the company originated. Foreign companies legally constituted in their own countries have the right to carry on their industry or commerce in Russia only after they have been duly and legally recognized, because no foreign company can have a legal existence in Russia except by virtue of an act of the Russian sovereignty.

According to the civil laws of Russia (articles 2139–2198), no shareholding or stock company can be founded in Russia, nor transact business therein, without a special authorization, which is accorded after a study of the by-laws of the company by the minister competent in such cases, who submits the by-laws, after revision and correction, either to the Committee of Ministers, if simple confirmation is sought for, or to the Imperial State Council, if the company asks for special privileges (articles 2140 and 2196). The Committee of Ministers or Council asks the imperial sanction to the by-laws. When this has been obtained, they are printed in the Official Bulletin of the Laws and Decrees of the Empire and thus receive the full force and effect of a special law.

The same course must be followed by a foreign company in order to obtain recognition, with a few modifications, promulgated by the Ministry of Finances on the 18th of November, 1887, in order to accelerate the procedure. According to this regulation, the foreign companies must address themselves to the above-named ministry and deposit or present a petition accompanied by the following documents duly legalized and translated into Russian:

(*a*) The statutes or by-laws of the company duly approved abroad and legalized by a Russian consul, in which the latter attests that the by-laws are duly drawn up according to the laws of that country.

(*b*) A power of attorney given by the company to its authorized representative in Russia, conferring upon him the right to petition for the said company in Russia.

(*c*) The accounts and balance sheet of the company for the last five preceding years, duly approved by the general meeting of the shareholders, as well as the distribution of its profits and the amount of dividends paid out for each share or title.

The Russian Government retains its entire liberty of action in the choice of the conditions which it may choose to impose upon a foreign company seeking to establish itself in Russia. There are, however, certain prescribed conditions which must be fulfilled by all companies. These are:

(1) The nomination or appointment of a general representative in Russia.

(2) The choosing of a domicile in Russia.

(3) Submission to the jurisdiction of all Russian tribunals.

(4) The observance of all Russian laws, and particularly of all special police regulations or ordinances regarding the industry carried on by the company.

(5) The payment of taxes (an annual tax of from 1,000 to 1,500 rubles by the representative of the company to the first merchants' guild and a tax of 5 per cent on the gross revenue of the company, deduction being first made of the amount placed).

(6) The interdiction against acquiring real estate within the western zone of the Empire and a promise to withhold from taking part in the formation of certain companies. (Imperial ukase of March 14, 1887. The navigation companies on the Caspian Sea can only be in the hands of Russian subjects, and its shares can not be sold to foreigners. Companies intending to exploit petroleum fields are subject to special laws and regulations, and must obtain authorization from the Ministry of Agriculture and of Public Domains, with the sanction of the Ministry of the Interior, the Ministry of Finances, and the chief of the administration in the Caucasus.)

(7) Acquiescence in the revocation of the governmental authorization, in the event of such revocation. (So far, a case of revocation has not yet presented itself. The ministry favors placing in the by-laws of a foreign company a clause authorizing it to merge its business with a Russian company. This clause is of special value, for if extraordinary events should cause the Government to want to revoke its authorization, it would first invite those companies whose by-laws have that clause to submit to the full extent of the Russian law, and companies whose by-laws contain this clause would thus find no difficulty in submitting themselves to the change.)

(8) The deposition of the yearly balance sheet.

(9) The publication in the Russian journals of the dates of the general meetings.

(10) The interdiction against changing the by-laws (without authorization).

(11) The interdiction against uniting with another company without special permission.

(12) The deposit of a special sum in the imperial bank. This is exclusively for insurance companies. The sum is 500,000 rubles ($257,000) in cash or public bonds. The special conditions for insurance companies were published in the Official Messenger of October 9, 1888.

*Acquisition by foreign subjects of real property in Russia.**

ARTICLE 1. In the ten provinces of the Kingdom of Poland, as well as in the provinces of Bessarabia, Vilna, Vitebsk, Volhynia, Grodno, Kief, Kovno, Kurland, Livonia, Minsk, and Podolia, foreign subjects can acquire no right of ownership whatever in immovable property, nor any right of usufruct in immovable property independent of the right of ownership in general and arising from a lease, outside the ports and the towns, with the exceptions of the cases mentioned in article 3 below.

NOTE.—The restrictions of the rights of foreign subjects, established by article 1, relative to the possession and usufruct of immovable property situated outside

* Code of law, volume 9, appendix to article 1003, note a.

the ports and the towns do not extend to the renting of houses, apartments, and country houses for temporary use and for personal residence.

ART. 2. In the localities pointed out by article 1, foreign subjects can insure the payments due to them by accepting as security immovable property; but the securities of this kind and the recovery of credits in general may not entail in favor of foreign subjects either the acquisition of the mortgaged immovable property or entrance into effective possession, or usufruct.

ART. 3. With regard to the rights of succession of foreigners as to immovable properties situated outside the ports and the towns in the provinces mentioned, the following restrictions are in force:

(1) The legitimate succession of the descendants, and of husband or wife as to property (immovable) remaining after the death of a foreign subject, takes place according to the laws in force if the heir has settled in Russia before March 14, 1887.

(2) In all the other cases of legitimate succession, as well as in cases of succession by testament, the foreign subject is obliged, within the term of three years, counting from the acquisition of the rights to the property (immovable), to sell the said property to a Russian subject.

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ART. 6. The dispositions of the preceding articles are applicable to associations, companies, and commercial and industrial societies, constituted by virtue of the foreign laws, even if they shall have been authorized to operate within the limits of Russia.

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*Articles of the civil laws regarding stock companies.**

ARTICLE 2139. Where a company is organized by a number of capitalists subscribing shares in an enterprise and thus forming a common capital, the participation and responsibility of each shareholder is restricted to his share in the enterprise.

(Remark.—Shareholders' societies having for their object the navigation on the Caspian Sea must be formed exclusively by Russian subjects.)

ARTICLE 2140. Companies can have for their object any useful enterprise or the exploitation of an invention which does not exclusively belong to a third person. Governmental authorization is necessary to enable it to constitute itself. It is not absolutely necessary that the object of the company should be commercial.

ARTICLE 2141. The governmental authorization can be given in three different ways, namely, (1) pure and simple, (2) with certain special advantages, (3) with concessions and privileges.

ARTICLE 2142. The Government, by according the authorization, does not assume any responsibility regarding the chances of the enterprise.

ARTICLE 2143. This article subdivides the companies into two categories, according as to whether the object of their enterprise requires preparatory studies and works of installation (as, for instance, for railways, bridges, or canal works), or permits the commencement of operations as soon as the capital is formed.

ARTICLE 2144. Concessions and privileges are accorded only to the first category of companies. The authorization pure and simple is given to the companies representing the second category.

ARTICLE 2146. The company can be founded for an indefinite time, but the concessions and privileges are accorded only for a specific time, which varies according to the nature of the enterprise to which they are related.

ARTICLE 2147. At the expiration of the term, they may be prolonged or renewed.

* Svod Zakonow, volume 10, part 1.

ARTICLE 2149. All companies must be provided with a license. The only exception made is in favor of those companies who are introducing into Russia a new commerce or industry heretofore unknown.

ARTICLE 2152. A company obtaining a concession can not dispose of its rights, nor merge or unite with any other company without special authorization from the Government.

ARTICLE 2153. A company is not permitted to alter or change its by-laws or to extend the field of its operations beyond the limits first prescribed, without at first obtaining due authorization therefor.

ARTICLE 2154. If all the shares are not paid up or subscribed for at the epoch determined by the by-laws, the company is not organized unless the shareholders reduce the capital and the Government approve the reduction.

ARTICLE 2156. A company ceases to exist if it does not begin its operations within the time specified by the statutes, if an extension has not been granted.

ARTICLE 2160. There can be but one kind of shares, namely, nominal. The statutes fix their value.

ARTICLE 2161. The amount of each share is either paid up in full at the time of the formation of the company or in quotas according to its needs.

ARTICLE 2163. The share is given to the shareholder only after full payment. Receipts to bearer are forbidden.

ARTICLE 2164. In case of default of payment within the specified time, the shareholder loses his title, and the company profits by the payments already made. The company has the right to substitute another share for the one thus annulled.

ARTICLE 2165. The number of shares for the founders can not represent more than one-fifth of all shares issued. They must be numbered. Founders' shares can only be given for services already rendered. Founders may obtain not only one-fifth of the first shares issued, but may obtain an equal portion of all subsequent issues. Founders' shares are transferable.

ARTICLE 2167. The holder may dispose freely of his shares and receipts. Nevertheless, during his lifetime the alienation can only be made by a regular transfer. All sales or purchases on fixed-time delivery are forbidden, and fines may be imposed upon those who take part in them.

ARTICLE 2173. Creditors have no rights upon the moneys paid in by a shareholder, but they can exercise their rights upon the shares and the accruing dividends.

ARTICLE 2174. The founders administer the company until it is fully constituted.

ARTICLE 2175. After this the general meeting of shareholders nominate the members of the council of administration.

ARTICLE 2176. This council represents the company and acts for it. Members of the council are not personally liable for the engagements of the company.

ARTICLE 2194. Before a concession is granted, the nature of the enterprise, whether the same is of interest for the public and in what manner and for what period the concession may safely be granted, are carefully considered, and the questions decided whether the company shall take out a license, and whether the shares shall at once be paid up in full.

ARTICLE 2195. When there are two demands of a like nature, and both offer equal guaranties, the preference is given to the one which was first represented.

ARTICLE 2196. After the project has been examined by the minister, it is submitted to the Committee of Ministers, if there is a demand for an authorization only; but, in case a concession is demanded, then the project is submitted to the Imperial Council.

ARTICLE 2197. After approval by the Emperor, the statutes are published through the instrumentality of the Senate, and the company publishes the same in the newspapers.

FAILURE OF CROPS IN SOUTHERN RUSSIA.

Reports received at Odessa from private and other sources leave but little room for doubt as to the unfavorable condition of the Russian grain and hay crops.

The past winter was unusually mild, and there was very little snow or frost. The spring season, up to the present, has been almost entirely without rain, and the same may be said of the winter season, practically no rain having fallen here since last November.

From the winter we pass almost at once into summer weather here in the south, and during the present year the change has been unusually rapid, and the drought has dried up the grasses to such an extent that the country surrounding Odessa is parched and yellow. There will be little or no hay for feeding purposes this year. This failure is general in the country bordering on the Black Sea and Sea of Azof and, in a less degree, in the provinces of Poltava and Kharkof. Cattle, sheep, and horses are even now being moved to localities where feed can be found for them.

The rye crop, it is feared, owing to lack of rain, will prove a complete failure in the regions mentioned above. An average crop of rye in the above region, which includes the provinces of Bessarabia, Cherson, Taurida, Ekaterinoslav, Poltava, Kharkof, and the Don Cossack and Kuban territories, would be 95,000,000 bushels. According to present reports, 30,000,000 bushels will cover this year's yield.

The Government has bought large quantities of rye for shipment to the Far East, paying 20 copecks (10 cents) per pood (36 pounds) over the market value for the grain. I am informed that the condition of the rye crop in the more northern and central provinces of Russia presents a more favorable aspect.

Winter wheat seems to stand too thick and too high for the season of the year. What I mean is that a shorter stalk and longer head would be more satisfactory, as it looks as if there would be plenty of straw and very little wheat.

Spring-sown grains, including wheat, are much in want of rain, and, unless they receive it copiously within the next two weeks, the outlook this year for Russia will be very poor indeed.

Owing to the drought this season, the farmers have held back large reserve stocks of various cereals, and less grain has been brought to this and other Black Sea ports than for many years past. Strange to say, prices are low, and, while they will no doubt rise, there is no present indication of such a movement.

THOS. E. HEENAN,

ODESSA, *May 20, 1899.* *Consul.*

CROPS IN RUSSIA.

Consul Heenan, writing from Odessa under date of June 2, 1899, confirms his report of May 20,* in regard to the failure of crops in southern Russia. Rain has not fallen to any extent, and cattle have been turned into the rye fields, all hope of saving this cereal having been abandoned. The yield of winter wheat will be far below the average; spring wheat will also be less than usual; oats and barley promise light crops. The consul adds the following particulars in regard to the affected districts:

The province of Cherson contains 17,495,685 acres of land, with a population of 2,732,832. It has eighteen cities, of which Odessa with 410,000 inhabitants, Nicolaiev with 100,000, and Cherson with 70,000 are the most important. The province of Bessarabia, with an area of 12,009,856 acres, has a population of 1,993,436. The largest town is Kishinev—110,000 inhabitants. The province of Taurida contains 14,919,974 acres, with a population of 1,443,560. The famous Crimea forms a part of this province. Here the culture of the vine reaches its highest development, and Crimean wines are well and favorably known all over Russia. The province of Ekaterinoslav has an area of 15,665,777 acres and a population of 2,112,651. The mineral resources are enormous, and millions of foreign capital are engaged in developing them. The province of Poltava contains 12,329,914 acres, with a population of 2,794,727. The province of Kharkof has 13,463,522 acres and a population of 2,509,811. The city of Kharkof has 180,000 inhabitants. The Don Cossack territory contains 40,660,808 acres and a population of 2,575,818. The Kuban territory, with an area of 22,840,040 acres, has a population of 1,922,770. The provinces of Kief and Podolia are the richest agricultural districts in European Russia. Kief contains 12,592,574 acres and has a population of 3,576,125. Kief, the largest city, has a population of 250,000. In 1898, 311,982 acres were sown in beet root, yielding 1,500,768 tons of beets, from which 167,975 tons of sugar were manufactured. The province of Podolia contains 10,383,294 acres, with a population of 3,031,513. Podolia had in 1898 254,471 acres sown with beet root, which yielded 1,330,100 tons of beets, from which 151,862 tons of sugar were manufactured. The province of Volhynia has 17,727,411 acres, with a population of 2,997,902. This province planted 62,076 acres in beet root in 1898, which yielded 330,671 tons of beets, giving 39,694 tons of sugar.

*See preceding report.

The average crop of the various cereals in these provinces is as follows:*

Province.	Rye.	Barley.	Oats.	Millet.	Winter wheat.	Spring wheat.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Cherson	14,850,000	18,000,000	9,563,000	2,520,000	6,600,000	12,300,000
Bessarabia	4,500,000	10,500,000	5,625,000	288,000	8,400,000	4,500,000
Taurida	4,243,000	12,000,000	5,062,000	576,000	6,600,000	8,400,000
Ekaterinoslav	10,286,000	14,250,000	4,500,000	1,008,000	860,000	12,600,000
Poltava	23,143,000	10,875,000	18,563,000	2,319,000	3,600,000	7,500,000
Kharkof	19,607,000	9,375,000	16,313,000	1,800,000	2,400,000	5,700,000
Don Cossack territory	15,750,000	13,500,000	12,375,000	3,060,000	5,100,000	23,400,000
Kief	16,714,000	5,250,000	29,812,030	5,760,000	14,100,000	240,000
Podolia	9,964,000	5,625,000	24,188,000	1,260,000	12,900,000	900,000
Volhynia	15,429,000	4,500,000	20,250,000	1,181,000	5,100,000	108,000

Besides the above cereals, the province of Cherson yielded 1,929,000 bushels of corn; Bessarabia, 17,679,000 bushels; and Podolia, 3,857,000 bushels.

The province of Poltava yields about 5,250,000 bushels of buckwheat annually; Kharkof, 1,800,000 bushels; Kief, 4,875,000 bushels; Podolia, 1,800,000 bushels; and Volhynia, 3,375,000 bushels.

The failure of the rye crop in this southern country is the most serious feature of the situation, because it is the food of the masses and this is the third year in succession in which the rye crop has failed or practically failed. This may be seen by the exports from Odessa:

	Tons.
1895	345,043
1896	214,570
1897	199,599
1898	97,990

*Under date of June 19, Consul Heenan gives the following statistics as to the yield in 1891 (the famine year) of the provinces named:

Province.	Rye.	Winter wheat.	Spring wheat.
	Bushels.	*Bushels.*	*Bushels.*
Cherson	8,916,000	3,235,000	10,912,000
Bessarabia	2,531,000	7,164,000	4,616,000
Taurida	3,790,000	5,404,000	7,015,000
Ekaterinoslav	8,873,000	456,000	14,500,000
Poltava	19,408,000	1,603,000	10,528,000
Kharkof	12,062,000	1,000,000	5,437,000
Don Cossack territory	14,073,000	4,997,000	20,676,000
Kief	15,293,000	11,514,000	232,000
Podolia	8,831,000	11,621,000	754,000
Volhynia	16,812,000	5,318,000	202,000

The famine year, notes the consul, did not produce a great diminution of rye and wheat in the southern provinces, from which there are now such unfavorable reports as to both winter and spring sown crops.

Failure of the crops in southern Russia is imminent. A line drawn on the map from Kief to the southern part of the province of Samara, and thence, in a northerly direction, following the course of the River Volga, to Kazan; thence west to Moscow, and south again to Kief, will give a fair idea of the area within which more or less famine exists. It would almost seem as if European Russia might be dismissed as a factor in successful agriculture. The climatic conditions throughout this area are of so uncertain a character as to be a constant source of anxiety and danger to the farming population. The widespread misery is appalling.

Under date of June 19, Consul Heenan adds that reports from central and eastern Russia indicate similar conditions as to shortage of crops. The province of Saratov has suffered severely from lack of rain. This province contains 20,879,357 acres and has a population of 2,419,844. It has ten cities with a population of over 10,000, of which Saratov (138,000) is the largest. The average crop of wheat (spring) has been 10,500,000 bushels; of oats, 30,938,000 bushels; of rye, 35,036,000 bushels.

Exporters at Odessa are in anything but a cheerful frame of mind and foreign houses contemplate closing for the season. There is undoubtedly, says the consul, considerable wheat held back by the farmers; but this does not indicate that they are in a prosperous condition. Nearly all are heavily in debt to the Government.

INHERITED PROPERTY IN FRANCE.

I forward the following translation of a communication recently made to the Statistical Society of France by M. Emanuel Besson, concerning the progressive increase in the value of inherited property in France in the nineteenth century.

After his history of the tax on inheritances, Mr. Besson, coming down to modern times, treats, in succession, three distinct periods, viz, up to 1850, 1850 and 1870, and after the events of 1871.

During the first half of the century, the circulation of securities showed but little activity. The annual inheritances increased very slowly in amount from 1826 to 1850, the year 1849 showing a gain of 275,000,000 francs ($53,075,000), as compared with 1826. The proportion was greater (60 per cent) for personal property than for real estate (31 per cent), although the actual amount of the augmentation was the same for each.

There was certainly an appreciable progress, corresponding more or less approximately with the normal development of taxable values.

Notwithstanding the proportionately greater increase in personal property during that period (1826–1850), real estate remained the more important element.

In 1826, personal property was only 34 per cent of the total of taxed values, real estate being 66 per cent. In 1849, the proportion was not notably changed, being 39 per cent for personal property and 61 per cent for real estate.

The second period was inaugurated by the passage of a very important fiscal law, that of the 18th of May, 1850, extending the succession tax to both French and foreign government funds, which had up to that time been exempted. This law also extended the same rules of taxation to the stocks of foreign companies, "for industrial and financial purposes," in so far as concerned an inheritance coming under the action of the laws of France. The bonds of foreign companies were temporarily exempted from the succession tax. The three categories of values newly taxed after 1851 increased the annual succession duties by a tribute of 86,000,000 francs ($16,598,000). This increase, which thereafter rapidly augmented from year to year, contributed very powerfully to the increase of the total of taxed values. There was progress in all directions. All classes of taxable values contributed to it, as shown by the following table, which gives the annual amounts of values subjected to inheritance tax:

Description.	1826.	1850.	1869.	Increase in 1869 as compared with 1850.	
					Per cent.
Personal property	$88,000,000	$155,000,000	$319,000,000	$164,000,000	105
Real estate	169,000,000	225,000,000	382,000,000	147,000,000	62
Total	257,000,000	390,000,000	701,000,000	311,000,000	79

The expansion of the annual amount of the succession tax on the side of personal property was evidently due to the taxation of securities under the law of 1850.

The fiscal law of May 13, 1863, extending the inheritance tax to the bonds of foreign companies, had a marked influence in the development of the annual amount derived from tax on personal property. The effect of this additional law was seen after the year 1864 in an increase of tax values of 100,000,000 francs ($19,300,000). The increase in the annual inheritance tax for real estate was due to the increase in the revenues derived therefrom. In 1851, these total revenues amounted to 2,500,000,000 francs ($482,500,000), and had risen in 1862 to 3,096,000,000 francs ($597,528,000).

The real values during this period showed a corresponding increase. The average price of land, per acre, from 1789 to 1851 was as follows: In 1789, $39; 1821, $62; 1835, $78; 1851, $100.

It will be noted by the following statement, giving the rental per acre, that farm rents showed a proportionate rise:

Kind of property.	1852.	1862.
Arable land, first class	$4.32	$7.47
Meadows	8.81	11.85
Vineyards	6.79	10.84

It may be remarked that there has been a tendency towards an equilibrium between the taxes derived annually from real and from personal property. This tendency, hardly perceptible between 1826 and 1850, is plainly visible at present and becomes constantly more pronounced. In 1855, personal property represented only 39 per cent, while real estate represented 61 per cent of the total.

In 1869, personal property rose to 45 per cent, while real estate fell to 55 per cent.

Taking up a study of the third period, Mr. Besson calls attention to the object and scope of reforms inaugurated, as far as succession taxes levied under the law of the 23d of August, 1871, are concerned. He says:

Many restrictions in the laws of 1850 and 1863 were removed by the law of 1871, which permits the imposition of a tax upon all personal property forming part of an inheritance coming within the scope of French law, going so far as to tax property forming part of an estate left by a foreigner domiciled in France, whether the domicile be authorized or informal.

Without taking account of the year 1871, in which the exceptionally high revenue receipts corresponded with an abnormal mortality, it will be seen that almost immediately after the passage of the law of the 23d of August of that year, the total annual amount of property coming under the inheritance tax rose rapidly. In 1875, it amounted to 4,000,000,000 francs ($772,000,000), and in 1879 to 5,000,000,000 francs ($965,000,000), in which personal property of all kinds amounted to 2,392,000,000 francs ($461,656,000).

From 1879 the annual sum taxed remained stationary until about 1884. From 1885 the figures rose and, kept up by a constantly increasing proportion of personal property, reached for the year 1892 6,404,000,000 francs ($1,235,972,000), of which 3,275,000,000 francs ($632,075,000) were for personal property and 3,129,000,000 francs ($603,897,000) for real estate. Since 1892, the annual amount of property coming under the inheritance tax has oscillated between 5,500,000,000 and 5,800,000,000 francs ($1,061,500,000 and $1,119,400,000).

A comparison between the years 1869 and 1896 shows the following figures:

Description.	1869.	1896.	Increase.	
				Per cent.
Personal property	$319,000,000	$539,000,000	$220,000,000	68
Real estate	382,000,000	521,000,000	140,000,000	36
Total	701,000,000	1,060,000,000	360,000,000	51

At the present time, the 5,500,000,000 francs ($1,061,500,000) annually taxed is distributed almost evenly between real and personal property, the personal property being about 100,000,000 francs ($19,300,000) more each year than the real estate.

The following are the returns for 1896:

Personal property:	
Government funds (bonds), French and foreign	$84, 600, 000
Securities, French and foreign	207, 000, 000
Other personal property	248, 000, 000
Total	539, 600, 000
Real estate	521, 000, 000
Grand total	1, 060, 600, 000

Mr. Besson terminates his explanations by setting forth the fact that—

The development of general wealth in the form of personal property sustains the spread of commerce and industry, allows the fructification of the most modest savings, and contributes, in a very large degree, to the prosperity of the system of public taxes.

This element of wealth, which at the beginning of the century was considered of little account, constitutes in our days one of the most fruitful branches of the fiscal revenues.

In the tax on inheritance, on gifts passing between living persons, on the sale of stocks and bonds and the sale of stamps, and the 4 per cent on all stock registered at the bourse, personal property pays a share of the general taxes at least equal to that paid by real property.

Productiveness of the revenue from personal property can not fail to increase in the future as economic development becomes more intense, as international exchanges are multiplied, and as human genius or chance discoveries may offer new employment for capital. But this wealth is not inexhaustible, and it is essential that it should not be driven from the country by taxation.

It is but proper, in this connection, to call attention to the fact that the tax on personal property yields a large revenue in France, because everything of that nature is taxed. The right to practice a profession, to open a store or saloon, to carry on a factory, to sell newspapers at a stand on a street corner, is taxed and that quite heavily. A tax is paid at the city gates to bring a chicken, eggs, or a few bottles of wine into the city. Some of these personal taxes really amount to double taxation. The American dentist in Lyons, for example, pays an annual license of 800 francs ($154.40) on his office and the same sum on his residence. A second-hand furniture dealer pays for a license and in addition a tax of 10 or 12 francs ($1.93 or $2.32) per year for the right to display his wares on the sidewalk. The tax on saloons is proportioned to their rent. If chairs and tables and small trees or plants in boxes are placed in front of the saloon, or an awning lowered over the sidewalk, a special personal tax is imposed for each of those articles. The money derived from these taxes is divided among the city, the commune, and State.

It was stated in the French Chamber of Deputies on the 9th of March, 1899, that the farms and vineyards of France paid 12.4 per cent of their revenue in taxes, that improved property paid 7 per cent, that licenses (patents) paid 6 per cent, and personal property 4 per cent. Paul Leroy Beaulieu, editor of the Economist Français, wrote recently that taxes in France are 75 francs ($14.48) per head and in England 56 francs ($10.81). He quoted from Eugène Pelletan the following rates of taxation per capita in the several countries mentioned:

Country.	Taxation.	
	Francs.	
Germany	30.50	$5.89
Austria	44.00	8.49
Holland	44.50	8.58
Belgium	30.16	5.82
Denmark	34.40	6.64

M. Beaulieu, in commenting on these figures, declares that the taxes in France are "beyond doubt from 50 to 150 per cent higher than those of other European nations, and 35 per cent in excess of those of Great Britain, though the latter country is considerably richer." He thinks that all the special taxes of France are not taken into account in the estimates.

JOHN C. COVERT,

LYONS, *May 17, 1899.* *Consul.*

ACCIDENTS TO WORKMEN IN FRANCE.

Under date of May 4, 1899, Consul Brunot, of St. Etienne, transmits a printed copy and a translation of the new law which went into effect on June 1 relative to accidents to workmen in France.

Omitting the minutia usual to legal documents of similar nature, and which render the report too voluminous for publication, the following abstracts cover the vital points of this new law:

Indemnity accidents.—Accidents occurring in the course of work to workmen and employees in the following occupations: Building, workshops, yard work, manufactories, transportation by land and water, loading or unloading, shops, mines, quarries, and every operation, in whole or in part in which are manufactured or handled explosive materials or in which use is made of motor power other than that of man or animals—give the victim, or those depending directly upon him, a right to indemnity at the expense of the head of the enterprise, on condition that the interruption of work exceeds four days.

Indemnity.—For actual and permanent incapacity, a pension equal to two-thirds the annual wages of the incapacitated; for partial but permanent incapacity, to one-half the difference between his regular salary and his reduced salary, occasioned by the accident; for temporary incapacity, a daily indemnity of one-half the wages of the incapacitated at the time of the accident, the indemnity beginning on the fifth day after the accident.

When the accident proves fatal, a pension is allotted on the following conditions to the persons stated:

(*a*) A life pension, equal to 20 per cent of the annual wages of the victim, to the surviving widow (or widower) who is neither divorced nor separated, the marriage to have been consummated prior to the accident. Should the widow marry, she forfeits her right to this pension, but will be allotted three times the amount of her annual pension in one sum as a final adjustment.

(*b*) For the children, legitimate or natural, recognized before the accident, orphans of father or mother, under 16 years of age, pensions, calculated on the annual wages of the victim, of 15 per cent of those wages in the case of only one child, 25 per cent if there are two children, 35 per cent if there are three children, and 40 per cent for four or more children. For children deprived of both parents the pension is 20 per cent for each child, but can not exceed in the aggregate 60 per cent.

(*c*) If the victim leaves neither widow nor children, as per *a* and *b*, each of the ascendants who depended on him will receive a life pension, and the descendants

a pension up to sixteen years. This pension will be equal to 10 per cent of the annual wages of the victim, but in no case can it exceed 30 per cent. These pensions (*c*) can be reduced proportionally, according to circumstances.

The pensions allowed in virtue of the present law are payable quarterly, and can not be transferred, nor are they subject to seizure.

Foreign workmen, victims of accidents in France, who cease to reside in French territory will receive as total indemnity an amount equal to three years' pension; members of their families not resident in French territory at the time of the accidents will receive no indemnity.

Employers are also held responsible for medical, pharmaceutical, and funeral expenses. The maximum funeral expenses can not exceed 100 francs ($19.30).

Employers can relieve themselves, during the thirty, sixty, or ninety days following accidents, of the obligations of paying to the victims the expenses of the accidents and the temporary indemnities or parts only of these indemnities, as specified herewith following, if they can show—

(*a*) That their workmen have joined a mutual aid society and they (the employers) have paid their share of the subscriptions to such society by mutual agreement; but such share shall never be less than one-third the total subscriptions.

(*b*) That such society assure its members, in case of accidents, during thirty, sixty, or ninety days, medical care and daily indemnity. If such indemnity is less than one-half the daily wages of the injured, the employers must make good the difference.

Full pensions and indemnities are allowed on wages amounting to 2,400 francs ($463.20) per annum; on all wages above that sum, pensions and indemnities are calculated at the rate of one-fourth the regular allowances.

Workingmen and employees can not, by reason of accidents of which they are the victims in their work, invoke any other provisions than those of this law.

Independently of the action resulting from the present law, the victim, or his or her family, possesses the right to claim damages for the injuries caused by the authors of the accident other than employer or his workmen, according to the rules of common law. The indemnity allowed in such case will exonerate in the same proportion the employer from the obligation imposed upon him by the accident. This action against a third party (responsible for the accident) can be exercised by the employer at his own risk, should the family of the victim fail to prosecute.

At the time of the definite settlement of the life pension, the victim can ask that one-fourth of the capital necessary to establish such life pension (calculated according to the tariffs made out for victims of accidents in the reserve fund for old age) be paid to him in money. He can also ask that his capital, less the one-fourth just mentioned, shall constitute a life pension for him, revertible as to one-half at most to his widow. The court in council chamber will decide these questions.

The remaining provisions of the law relate to declarations of accidents and inquiries thereinto, competence, jurisdiction, procedure, revision, guaranties as to expenses incurred, etc.

In transmitting the text and translation of the foregoing law, Consul Brunot says:

I must state that the law has provoked a great outcry in the public press, while the heads of small industries assert that if it is enforced they will have to throw up their business altogether.

The workmen are, naturally enough, well pleased at the guaranties given them in this law; but it is feared that the result will

not be entirely to their benefit, as employers will, in order to minimize their risks, refuse, as much as possible, to employ married men, especially those with children, and will also give preference, especially in the border districts, to foreign workmen.

These and other considerations have agitated public opinion, and this agitation found an echo a few days ago in the Parliament, where the question was warmly debated by the deputies, some of whom denounced the law in strong terms, while others asked the Government to postpone the application of the law until the beginning of the next year. The Government refused to postpone, but promised to appoint a committee to examine the law and report upon such modifications as might be considered necessary.

FOREIGNERS IN JAPAN.

Consul-General Gowey sends the following, dated Yokohama, June 15, 1899:

I give below a statement showing the number of foreigners resident in Japan in March, 1899, as compared with the year 1891. I am assured of the official character and correctness of these figures. The returns for 1899 were compiled by the Foreign Office, and those for 1891 are taken from publications of the cabinet of the Japanese Government.

Nationality.	1899.	1891.
Chinese	5,297	5,344
British	1,763	1,725
American	1,140	967
German	481	523
French	420	378
Russian	214	74
Korean	196	6
Portuguese	124	138
Swiss	69	58
Austrian and Hungarian	66	51
Dutch	61	93
Italian	46	39
Danish	37	56
Swedish and Norwegian	31	44
Spanish	24	15
Belgian	13	20
Hawaiian	13	14
Brazilian	11	.....
Grecian	4	.....
Turks	3	.....
Mexican	2	4
Total	10,015	9,549

Under date of May 11, 1899, the consul-general transmitted the following figures as to the number of foreigners resident in Tokyo:

Nationality.	Number.	Nationality.	Number.
American	235	Chinese	107
English	177	Indian	3
French	95	Portuguese	5
German	79	Austrian	5
Danish	5	Belgian	5
Swiss	11	Dutch	15
Spanish	9	Brazilian	5
Italian	11	Mexican	2
Russian	19	Total	921
Korean	134		

TRADE OF HONGKONG IN 1898.

As Hongkong has no custom-house, the only official source of information concerning imports and exports is the annual report of the harbor master. His report for the year ending December 31, 1898, has just been published, and it contains many items of interest to American exporters and shipowners who are interested in the commerce of southern China and the Philippines. It will also be interesting to note the increase of American shipping in this port in 1898 over 1897. This has all taken place since August, within a period of four months. The increase for 1899 will be fully double that of 1898, because of the large number of ships plying between Manila and Hongkong that have gone under the American flag, and because of the greater consumption of American goods in Manila.

The total tonnage entering and clearing this port for the year 1898 amounted to 17,265,780 tons, an increase compared with 1897 of 1,327,606 tons. There arrived 39,815 vessels, aggregating 8,648,274 tons. Eleven steamers flying the American flag entered during 1898, as against 4 in 1897. Thirty-two sailing vessels came in under the American flag, as against 30 in 1897; America standing second to Great Britain, with 36 under the British flag.

The year 1898 was marked by heavy trade in rice and coal, and the introduction of oil from Langkat, Sumatra. The demand for rice was largely from Japan, and that for coal was a result of the late war with Spain and the centering of so many foreign fleets in this harbor. The American kerosene-oil trade remained practically the same as in 1897. American flour shows a considerable increase in spite of the fact that from April to August the Manila market was practically closed to it. Hongkong imported from the United States 270,204 tons of cargo, as against 278,711 tons from the continent of

Europe and 416,377 tons from Great Britain. The imports from the Philippine Islands amounted to 169,526 tons. The exports from Hongkong to the United States amounted to 148,525 tons and to the Philippine Islands to 152,395 tons, leaving a balance of trade heavily in our favor. Among the imports in which the United States is interested are 103,544 tons of flour, 36,611 tons of cotton and cotton yarn, 55,160 tons of hemp, 67,362 tons of kerosene in bulk, and 59,115 tons of kerosene in case, all of which items except kerosene show an increase over 1897. There arrived during 1898, on vessels of all classes, 3,290,902 passengers. The total revenue of the harbor department, which is made up of light dues, licenses, and internal revenue and court and office fees, amounted to $183,628.01. These figures in some measure show Hongkong's importance in the shipping world. The peculiarity of the Hongkong trade is that the consumption of imports on the island itself is so small, as compared with the bulk of the trade, that it can be stated that almost all imports are again exported. Hongkong has often been called a vast bonded warehouse and clearing house for southern China and the surrounding countries.

ROUNSEVELLE WILDMAN,
Consul-General.

HONGKONG, *May 17, 1899.*

NOTES.

Licenses for Commercial Travelers in Russia.—Consul Marshal Halstead, of Birmingham, on July 11, 1899, writes:

The London correspondent of the Birmingham Post sends the following information concerning the new regulations for commercial travelers in Russia:

The Board of Trade have received from the Foreign Office the following translation of an explanatory notice relative to the provisions of the new Russian regulations respecting commercial travelers and their licenses, which has just been issued by the Russian Government. By article 59 of the law of the 8th of June, 1898, which imposes the industrial tax, the right of employing commercial travelers is confined to commercial firms which have paid the tax in question under class 1 and to industrial enterprises which have paid the said tax under the first three clauses. This provision applies equally to commercial firms and to industrial enterprises which may or may not possess businesses of the same kind in Russia. The tax under class 1 amounts to 500 rubles ($257) in the case of commercial firms and to 500, 1,000, and 1,500 rubles ($257, $515, and $772) in that of industrial enterprises. Moreover, every commercial traveler must pay a personal tax of 50 rubles ($25.75) annually. Industrial enterprises which have no business of the same kind in Russia, but which carry on a wholesale trade in the Empire through their commercial travelers, are placed on the same footing as commercial enterprises, and consequently pay a tax of 500 rubles, instead of that of 500 to 1,500 rubles imposed in the case of industrial enterprises. In view of the fact that the industrial tax is raised by the issue of industrial licenses, commercial travelers who wish to provide themselves with personal licenses must present for inspection either the original or a duly attested copy of the licenses issued to their employers. Commercial travelers in the employment of commercial firms or of industrial enterprises which are not provided with licenses according to the regulations, will not be permitted to carry on business until their employers have taken out the licenses in question, either on personal application or through their commercial travelers. Commercial firms or industrial enterprises provided with licenses according to the regulations may have an unlimited number of commercial travelers in their employment, on condition that each of these commercial travelers shall take out annually a personal industrial license of 50 rubles ($25.75).

Leather Industry in Russia.—Consul-General Holloway sends the following from St. Petersburg, June 9, 1899:

For the purpose of encouraging the leather industry in Russia, the Government has decided to place the quebracho tree—found in Chile and Mexico—on the free list.

The principal material for tanning in Russia is willow bark, which is collected in the early spring by the peasants before field labor

begins; consequently, when the question of duty on tanning material is considered, the interests of the peasants are involved.

The willow bark contains but 4 per cent of tannin, while the quebracho tree yields 20 to 24 per cent, and is necessary for the preparation of leather of a high grade. Previous to 1882 tanning material was admitted free, but during that year a duty of 4½ cents per 36 pounds was levied; this was reduced to 3½ cents per 36 pounds in 1896. Last year, a committee appointed to consider the question decided, inasmuch as quebracho wood is not raised in Russia, is a necessity, and is only used as a mixture with willow bark and other tanning material employed in the leather industry, to admit quebracho wood in logs and beams free of duty from and after February 15, 1899.

The loss of duty is estimated at $22,000 annually, and it is expected that sum will be more than replaced by the increased manufacture of leather. Russia is rich in raw skins, which are being exported to England, Germany, and Finland. These countries receive their tanning material free of duty and export leather to Russia.

Russian Regulations Concerning the Flax Trade.—Consul-General Holloway, of St. Petersburg, on June 20, 1899, writes:

In consequence of complaints concerning the preparation of flax for the market, the Emperor has approved new rules prepared by a special commission, which will be in force from and after September 1, 1899, viz:

The flax must not contain any garbage or other admixture, or be wet, in order to increase its weight. Each bundle of flax must not weigh more than 20 pounds and consist of fiber of one and the same quality. The bundles must be prepared according to the length of the fiber, without the heads, and tied at one-third of their length with twisted flax in such a manner as to permit the fiber to hang loose on both ends, in order that the same may be examined without untying the bundles.

The penalties for violating these regulations are: For selling, preparing, or keeping for sale flax containing garbage or other admixtures, or wetted to increase its weight, imprisonment for not more than a month, or a fine not exceeding $50; for violating the other rules, the sellers will pay a fine not exceeding $50.

The German vs. American Pound Weight.—In compliance with a Department instruction, Consul Brodowski, under date of July 7, 1899, transmits the following explanation regarding the continued use of the pound as a weight measure in Germany and the relative values of the German and American pound:

The metric system of weights and measures was introduced into Germany shortly after the Franco-German war, but the Germans

in general in their everyday dealings continue the use of the pound almost exclusively, especially older people, who in their younger days were accustomed to this expression. All my bills here for meat, groceries, etc., are made out in pounds; and a scale of the newest construction, which I purchased to verify the weights of goods delivered, indicates both kilograms and pounds. One kilogram is exactly two former German pounds, and such German pound therefore equals 1.1023 American pounds. If a German firm, especially a smaller one, which can not afford to employ an English-speaking clerk, writes its letter to the United States in German and orders its goods in pounds, meaning German pounds, and the American firm makes its estimate in American pounds, the result will be trouble and misunderstanding. It is well, therefore, for our people in their correspondence with German firms to make a note of the difference between the German and the American pound.

Furniture in Germany.—Vice-Consul-General Hanauer writes from Frankfort, June 12, 1899:

There are no factories in Germany where cheap furniture is produced; it is made in small quantities at the workshops of individual joiners, who are supplied by wood-working establishments with the different parts in an unfinished state. These joiners work at a very cheap rate. It may pay American manufacturers to export high-class articles of wooden furniture to Germany, provided these are tasteful in design and superior in finish to those made in Germany. They should be of superior workmanship and solidity, and, if anything, somewhat cheaper in price than similar articles of German make. It must be taken into account that such American furniture will have its original cost price increased by about 20 per cent of the selling valuation here, owing to the cost of packing, freight, insurance, and the German import duties. The usual terms for selling furniture in Germany are three months' credit; if payment is made on delivery of goods, a discount of 3 per cent is customary. Frankfort is a large market for the sale of furniture, and many houses here are engaged in this line.

Dried Fruit in Germany.—In reply to inquiries by the Oregon Board of Horticulture (the letter has been forwarded to the board), Vice-Consul-General Hanauer writes from Frankfort, June 5, 1899, in part as follows:

The import duty of 30 marks per 220 pounds on canned fruits or preserves is an obstacle to the sale of United States fruit prepared in

this way. Dried and evaporated fruit, however, can be sold at a profit. Up to this time, only dried plums have reached this market from Oregon. Large plums, packed in boxes holding 25 pounds, bring an average price, f. o. b. Portland, of from 4 to 5 cents in United States currency. The boxes should be lined with good paper and be artistically labeled. Apricots, pears, and nectarines should be packed also in boxes containing 25 pounds each. Evaporated apple rings should come in 50-pound boxes. Dried pears and apples are packed in hogsheads. Care should be taken that the fruit be dried or steamed on wooden frames, not on zinc, nor should they be bleached by the aid of metallic substances, as the law prohibits these methods.

Export Premiums on Flour in Germany.—The secretary of the embassy at Berlin, Mr. Jackson, writes, under date of July 7, 1899:

In the unofficial part of last night's Reichsanzeiger, there is published a notice to the effect that the Federal Council, at the instance of the Millers' Union and other organizations of similar character, and in accordance with a wish expressed by the Reichstag, has agreed upon new regulations, which will go into force January 1, 1900, changing the provisions in regard to the certificates issued by customs officials upon the exportation of rye and wheat flour. Hereafter, the flour is to be graded, and the exporter is to be entitled to import, free of duty, from 100 to 158.33 per cent of the quantity of rye, or from 100 to 160 per cent of the quantity of wheat, in accordance with the quality of the meal exported. The official test of these regulations has not yet been made public.

Wheat and Sugar in Spain.—The Department has received from Mr. Mertens, in charge of the consular agency at Valencia, a report dated July 3, 1899, to the effect that the wheat crop throughout Spain has been very poor this year. During the month of May, 8,000 tons were imported from Russia, 5,000 tons from the United States, 4,000 tons from France, and 18,000 tons from other countries—*i. e.*, British India, South America, and Australia (a trial shipment of 1,000 tons from the last-named country). During the first five months of the year, 109,000 tons have been imported. Mr. Mertens continues:

The sugar question is still unsolved. The demand is great, and the home factories can not supply the market, in spite of the strongly

protective tariff. The following figures show the import for the first five months of 1899, as compared with the same period of last year:

From—	1899.	1898.
	Tons.	*Tons.*
Cuba	6,000	300
Puerto Rico	71	4,000
Philippines	2	243
Canary Islands	500	96
Other countries	9	5

In all, about 6,600 tons were imported during the period of 1899 under consideration, against some 4,600 tons last year. Foreign refined sugar, notwithstanding the high duty, can almost compete with the Spanish home product.

Colonial Office in France.—Consul Skinner, of Marseilles, under date of June 6, 1899, says:

The Chamber of Commerce of Marseilles informs the commercial world, upon the authority of the Minister for the Colonies, of the organization of a colonial office. The administrators of this office hold themselves in readiness to respond to inquiries made verbally or in writing on the following points:

(1) Upon territorial concessions that are obtainable in the various French colonies, the regulations which govern the concessions, the capital necessary to exploit them, the nature of crops suitable for them, the cost of common labor, the climate—in a word, to all that concerns the exploitation of any portion of the French domain.

(2) Upon the materials and products that European France should obtain from various localities in its several colonies for its own agriculture, manufactures, or commerce.

(3) Upon the French products that should be marketable in the colonies or protectorates of France.

(4) Upon the tariffs, port charges, cost of freight by land or sea, cost of labor in connection with handling of ingoing or outgoing freight.

(5) Upon public works and enterprises of all sorts in progress or contemplated, upon quarries, mines, etc., in the colonies.

The colonial office is established at the Palais Royal, gallery of Orleans, Paris.

New Fuel in Belgium.—The following, dated Ghent, May 27, 1899, has been received from Consul Le Bert:

I would submit the following translation from L'Écho International. Considering the popularity of this material, and the enor-

mous profits from its manufacture, the article may be read with interest by many at home.

THE FIRE LIGHTER VÉSUVE.

It is under this denomination that a company is being formed in Belgium for the working of a patented process of manufacturing fire makers of peat and rosin. The low price, enabling all classes to buy it, the intensity of heat, and the extreme rapidity with which it takes fire have made it an article of necessity in every household. It will supplant the use of kindling wood and is superior to any fire lighter invented up to the present day. It does away with the deplorable habit of lighting by means of petroleum. A very little piece of "vésuve" gives instantaneously a good fire. This invention will meet with the same success upon its appearance on the Belgian market that it obtained in Germany.

On December 31, 1898, a dividend of 25 per cent of the entire capital engaged was distributed by the enterprise. It has been demonstrated that on April 12 a profit had been realized sufficient to allow a dividend of 75 per cent. The consumption in summer will not be less than in winter, as it has been proven that a fire lighter "vésuve" of the dimensions of 4¼ by 2 by 2 inches and weighing from 2 to 2⅔ ounces will burn for a period of ten minutes, and give enough heat to boil water.

Cost of Canadian Canals.—Commercial Agent Hamilton, of Morrisburgh, under date of July 6, 1899, sends the following printed statement of the cost of the canals of Canada and the depth of these water ways:

A recent official return shows the depth and cost of the canals and river works forming the connection between the Great Lakes and deep-water navigation at Montreal. The Welland Canal on July 1, 1896, had 13 feet 9 inches of water, and had cost $23,796,353.41; the Murray Canal, with 14 feet of water, had cost $1,247,470.26, and the Beauharnois Canal, with 9 feet, $1,611,690.26. The canals and connected river improvements in course of construction or enlargement on July 1, 1896, had cost as follows: Sault Ste. Marie Canal, $3,748,011; Galops Canal, $1,401,365; Rapide Plat Canal, $1,496,078; Cornwall Canal, $4,008,039; Soulanges Canal, $2,275,908; Lachine Canal, $7,636,439; St. Lawrence River works, $1,201,795.

The contracts awarded since July 1, 1896, are as follows: Lachine Canal, $18,000; Soulanges Canal, $2,093,840.42; Galops Canal, $2,331,888; North Channel, $700,000; Farran's Point Canal, $670,000; Galops Rapids, $125,740; St. Lawrence River, $65,222; Sault Ste. Marie, $51,579.

The estimated cost of completing works over and above amounts involved in contracts existing on July 1, 1896, is:

Lachine Canal, enlarged lock and dredging down entrance	$500,000
Soulanges Canal	685,000
River St. Lawrence	685,000
Cornwall Canal (widening at upper end)	156,000
Farran's Point Canal	750,000
Rapide Plat Canal	Nil.
Galops Canal	2,960,000
North Channel	700,000
Welland Canal (Port Colborne, deepening approach)	500,000
Sault Ste. Marie Canal	400,000

Assay Offices in British Columbia.—Consul Dudley, of Vancover, under date of June 10, 1899, writes:

The government of this Province has decided to establish an assay office in this city, and has also made arrangements with the Victoria Board of Trade and bankers there for the assaying of gold at the government assay office, which has heretofore merely made assays for the benefit of the department of mines and not for private individuals. The agitation which has resulted in this action was caused by the bankers and others who objected to paying the fees asked by the United States Government. The requirement of a consular fee and an entry fee were regarded as hardships.

Railway Concession in Mexico.—Consul Griffith, of Matamoros, on June 3, 1899, says:

I have to inform the Department that one of the local capitalists who has just arrived from the city of Mexico brings reliable information to the effect that the Compañia Sautena has been granted, by the Mexican Government, a concession to build a branch railroad from Matamoros, in the State of Tamaulipas, to Monte Morelos, connecting there with the Mexican Gulf Railroad. Eight thousand dollars is the subsidy which the concession carries, and a further assurance that the company has $3,000,000 in cash will render the proposed construction easy. The leading citizens here entertain the utmost confidence in this project and feel greatly encouraged by the news that the concession and subsidy are already secured. Inasmuch as President Diaz two years ago declared that no more concessions for railroads would be granted by the Mexican Government, unless positive assurance were given of the ability and intention of the company seeking such concession to construct the railroad, one may conelude that the near future will witness the commencement of the development on a large scale of the varied agricultural and mineral resources of the State of Tamaulipas.

Match Monopoly in Colombia.—The secretary of the legation at Bogotá, Mr. McNally, sends, under date of May 7, 1899, translation of a contract recently published in the Diario Oficial. It appears that the French Match Company is recognized as owning the monopoly which was adjudicated to Euripides Salgar in October, 1897. The company renounces its rights to the match monopoly, but this renunciation will not take effect until after the new sale of the monopoly, which is soon to be made, so that the company alone

can introduce matches until the new adjudication. The Government acknowledges having received from the company the sum of 666,666 francs ($158,666.54), which is to be left in the hands of the Government until the monopoly is granted. The Government fixes 640,000 francs ($123,520) as the basis for the sale of the monopoly, which will be effected within five months. Matches belonging to private parties that have been ordered between January 11 and 24, 1899 (on which dates resolutions were passed, one declaring the importation of matches free and the other suspending the effects of the first resolution), and that have been shipped to Colombia not later than March 28, may be imported on payment of the duties.

Electricity in Ecuador.—The following extracts are from a letter by Consul-General De Leon, dated Guayaquil, June 12, 1899, to a New York firm, to which the original has been forwarded:

There is no electric power used in Guayaquil and no demand for electrical supplies. I believe, however, that there is an excellent opening for an electric-light and street-railway service. This is a prosperous city of about 50,000 inhabitants, and with the construction of the proposed railway to Quito is bound to increase in population and wealth. It is at present lighted by gas of poor quality, which costs the municipality a considerable sum annually. A street-car system traverses almost every street; but mules, the motive power, are costly.

The finances of the municipality are in flourishing condition. The stock of the car company was at 50 in 1896; there is now a large cash reserve equal to 50 per cent of capitalization; 15 per cent annual dividends are declared, and the stock brings to-day $150 per share.

Fuel is scarce and expensive, but superb water power is available at some distance from the city. In 1896, the installation of an electric-light service was in progress; but the great fire, which burned eighty-three blocks of the best part of the city, destroyed the work and caused the enterprise to be abandoned. The city is almost rebuilt with a better class of edifices, and the time seems ripe for a system combining transportation and illumination.

Inland-Navigation Project in South America.—Minister Loomis writes from Caracas, under date of June 16, 1899, in regard to a plan recently presented to the Government which, says the minister, looks to the construction of the greatest system of inland

water ways in the world. It is proposed to connect by means of canals the great river systems of the continent of South America, making a navigable water way from the valley of the Orinoco to that of La Plata, inclusive. The estimated cost of this work is $200,000,000, which figure, however, is largely conjectural, as no accurate surveys or detailed statement of the probable cost has ever been made. It is not unlikely, continues Mr. Loomis, that this matter will be taken up seriously by some of the South American governments within a few years.

Plans for Montevideo Port Works.*—Minister Finch sends from Montevideo, May 26, 1899, copies of the plans and specifications for the proposed harbor works at that place. The plans, he says, call for a depth of 26 feet; but he is informed that the contract will call for 30 feet. Notice of the change will be given in the published proposals. The minister urges that American representatives, properly introduced, be sent to Uruguay to do the preliminary work. The money is to be paid in installments, as the work is completed.

The plans have been filed in the Bureau of Foreign Commerce, where they can be examined by interested parties.

Proposed American Bank in Caracas.—Under date of May 5, 1899, Consul Plumacher writes from Maracaibo in regard to the establishment of a bank at Caracas by United States citizens, represented by Mr. George W. Upton. In a communication to Consul Plumacher, Mr. Upton says that the capital of the bank is to be 15,000,000 bolivars ($2,895,000); it is to be installed within four months, and the charter will last fifty years. The Government has been petitioned to grant free introduction of the furniture and materials necessary for the construction of the buildings. Mr. Plumacher adds that such an enterprise in Maracaibo would be remunerative and would facilitate United States trade.

Railroad Ties Forgotten in Brazil.—Consul Kenneday, of Para, under date of May 25, 1899, says:

Inquiries are frequently made at the consulate as to the owner of a quantity of railroad ties which are piled up on the river bank

* See *ante*, p. 41; also CONSULAR REPORTS No. 217 (October, 1898), p. 239, and No. 226 (July, 1899), p. 583.

here. They are said to belong to an American syndicate which some time ago undertook the building of the railway up the Madeira. Mr. Watrin, of the firm of Watrin & Co., has called to ascertain whether they could be purchased, as he wanted to buy them. Not being able to find the owners, I make mention of the inquiry in this report.

New Remedy for Tuberculosis.—The following, dated June 26, 1899, has been received from Commercial Agent Atwell, of Roubaix:

A new method of treating bronchial and pulmonary diseases has recently been called to the attention of the Academy of Medicine by Dr. Mendel. The treatment is specially recommended for tuberculosis.

He injects daily into the bronchial tube essence of eucalyptus, thyme, and cinnamon, held in solution in olive oil. The oil in descending slowly comes into contact with the walls of the tube and the upper lungs. The gas that is set free saturates the air in the lungs and acts on the mucus membranes as far as the air penetrates.

Dr. Mendel has thus far treated sixteen tuberculosis patients and two suffering from simple bronchitis. In all these cases he has noted, after a treatment of one or two weeks, a lessening or complete cessation of the cough and expectoration, as well as a return of sleep, appetite, and strength.

Sale of Specimens of Persian Art.—Vice-Consul-General Tyler writes from Teheran, May 17, 1899, in regard to a collection of examples of Persian art that is to be sold in that city. Certain handicrafts in Persia, says Mr. Tyler, have survived, in various forms and degrees of excellence, from a very remote antiquity. In these, the history, the development of the art, and the pictorial representation of the characteristics of national life are the chief elements in the consideration of the æsthetic and commercial value of the product. Comparatively few specimens of the older art industries are now to be found in the country, and soon none will be left. The Persian designer has never, in artistic shape or delicacy of finish, equaled the Greek artist, but in brightness and harmony of color and in the durability of materials, when at his best, he has had few superiors. The collection that is to be sold, continues Mr. Tyler, consists of armor, scimiters, hunting knives, brass and steel work, glazed tiles, porcelain, brocades, embroideries, and silver coins. From a careful examination of the articles, he thinks that, with some exceptions, they are representative of the best periods of Persian workmanship.

A few specimens are probably unique in age and quality and almost the last examples of their kind. Mr. Tyler wishes the matter brought to the attention of collectors in the United States, and says he will be pleased to answer any inquiries on the subject.

Siberia no Longer a Penal Colony.—Under date of June 1, 1899, Consul-General Holloway, of St. Petersburg, sends the following translation from the Government Messenger of May 19, 1899:

The Emperor, in examining the question of the transportation and penal servitude of criminals, has taken the following facts into consideration:

The transportation of criminals to Siberia, established in the seventeenth century, assisted to populate this vast and wealthy region, which was in need of workmen for constructing roads, fortresses, and cultivating Government lands. Later on, penal servitude was introduced; but when Siberia began to be more populated by emigrants, who earned their living by honest labor, the sending of criminals to that country became pernicious to the emigrants. With the development of the ways of communication and industries of Siberia, the country has lost something of its penal character. The frequent escapes of the criminals from the localities of transportation to the interior governments create vagrancy and increase a class of people dangerous to the residents.

The question of transportation of criminals and penal servitude was an object of great anxiety to the Emperors Alexander II and Alexander III, and therefore the present Emperor, Nicolas II, issued the following order May 6–18, 1899:

I. A commission of the officers of the Ministry of Justice and representatives of the respective departments, under the auspices of the Minister of Justice, shall be formed.

II. The commission is to work out the following:

(1) To replace transportation of criminals by punishments by courts.

(2) To abolish or limit administrative transportation by peasant boards.

(3) To reorganize penal servitude and the deportation which follows.

(4) To better the condition of the convicts now in Siberia.

(5) To improve prisons where criminals are confined awaiting transportation and deportation.

(6) To establish compulsory public labor and workhouses as penal measures.

(7) To provide means for carrying out the measures necessary for the reorganization of the transportation of criminals and of penal establishments.

III. The Minister of Justice is to ask direct, and not through any department, for the imperial sanction of the committee's recommendations.

Emigration to Siberia.—Consul Smith writes from Moscow, June 13, 1899:

According to the last reports of the emigration administration, the total number of emigrants to Siberia during 1898 was 200,000, of whom 40,000 were pioneers. The number of those returning to Russia has decreased considerably. At the commencement of the current year, 38,940 allotments remained open.

Japanese Tea Exports, 1898–99.—Consul-General Gowey sends from Yokohama, under date of May 16, 1899, statistics of the export of tea from Japan to the United States and Canada during the season 1898–99, as follows:

Export.	Pounds.
From Yokohama	25, 946, 020
From Kobé	13, 985, 219
Total	39, 931, 239

Destination.	Pounds.
New York and East	9, 963, 328
Chicago and West	13, 340, 815
San Francisco and Pacific coast	4, 362, 089
Canada	12, 265, 007
Total	39, 931, 239

New Treaties in Japan.—Minister Buck of Tokyo, under date of June 17, 1899, transmits translation of an imperial ordinance bringing into operation the new treaties between Japan and other powers. Mr. Buck notes that the French and Austrian treaties do not come into effect until August 4, while the others are effective July 17. The ordinance reads:

IMPERIAL ORDINANCE NO. 251.

The convention of commerce and navigation promulgated on August 27, 1894; the convention of commerce and navigation promulgated on August 16, 1895; the convention of commerce and navigation promulgated on September 10, 1895; the convention of commerce and navigation promulgated on May 16, 1896; the convention of commerce and navigation promulgated on November 19, 1896; the convention of commerce and navigation promulgated on December 28, 1896; the convention of commerce and navigation promulgated on May 22, 1897; the convention of commerce and navigation and the convention of amity, residence, and commerce promulgated on September 15, 1897; and the convention of amity and commerce promulgated on September 16, 1897—shall be enforced on and after July 17, 1899. The convention of commerce and navigation promulgated on March 30, 1898, and the convention of commerce and navigation promulgated on September 9, 1898, shall be enforced on and after August 4, 1899.

Gas-Lighting Contract in Sumatra.—Consul Everett, of Batavia, under date of June 13, 1899, writes as follows:

I send herewith plans* for lighting the city of Kota-Radja, in Atcheen, Sumatra. I have been trying for some time to induce the government and various concessionnaires to open some of their public works and contracts to American bids, and have finally

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

succeeded. The contract in question, though it may be very profitable, is relatively small. It is, however, an entering wedge, and if successfully put through will, I am informed, be productive of more opportunities. I would suggest that the plan be carefully looked into by responsible people, with a view to submitting bids. The city is to be lighted according to the Washington incandescent gas-lamp system (in Dutch, "Petroleum-gas-gloeilicht, sijsteem Washington"), which is that used in most of the cities of this colony. Kota-Radja is the headquarters of the governor of Atcheen. It is a very busy place, and the traffic is out of all proportion to the nominal population. I would suggest that any company which may wish to make a proposition should communicate with Mr. W. H. Smit, the concessionnaire, care of this consulate. I shall also be glad to answer any questions on the subject.

Mining Law of the Dutch East Indies.—Under date of June 1, 1899, Minister Newel sends from The Hague translation of an article in a law relating to mining operations in the Dutch East Indies, which has recently received royal sanction. The article prohibits the carrying on of mining operations except by citizens of the Netherlands, persons domiciled in the Netherlands or the Dutch East Indies, or companies of which the majority of the managers satisfy one of the preceding requirements.

Grain Export from China Prohibited.—Consul Martin, writing from Chinkiang, May 29, 1899, sends the following notice from the commissioner of customs of that port:

The commissioner of customs gives notice that, by order of the governor-general of the two Kiang provinces, the export of grain from this port is temporarily prohibited, beginning with the date of this notice.

Chinese Likin Tax on Rice.—Consul Martin, of Chinkiang, under date of June 5, 1899, transmits a notice from the local commissioner of customs imposing a likin charge on rice. It reads:

A likin charge of 5 candareens* per 150 catties (200 pounds) on rice shipped at this port by steamer is to be introduced on the 15th instant. This tax is payable by native shippers of rice at the likin office previous to its being passed at the custom-house, and its payment will be certified to by the impression of a special

*The candareen is the hundredth part of the tael. The Chinkiang tael was valued at 68.6 cents gold on April 1, 1899.

likin seal on the application to ship, which will be accepted at the custom-house as proof. The authorities desire that applications to ship rice bear the signature of the owner, and that foreign merchants should not tender applications on behalf of natives.

This arrangement does not effect the prohibition at present existing against the export of grain.

Spanish Tariff on Flour.—Consul Sprague, of Gibraltar, on the 21st of June, 1899, writes that there is a differential duty of 2 pesetas* for every 100 kilograms (220 pounds) between United States and British flour entering Spain, to the prejudice of the former. The matter, he adds, is of some importance, as at present American flour can undersell other foreign importations in this line.

Russian Oil in the Azores.—Consul Pickerell, of St. Michael's, under date of June 8, 1899, reports the arrival of two consignments of Russian illuminating oil, being in all 700 cases of 65 pounds each and 125° test. This oil, Mr. Pickerell understands, is shipped by J. H. Andressen, of Oporto and Lisbon, and consigned to Clemente Jacintho de Costa. He adds:

There is evidently a desire to force the sale, as Mr. de Costa says that the price is higher than American. His complaint has been met by the answer to go ahead and sell it, as he would be protected in all loss. The oil can is stamped Batum.

New Mail Service with the Azores.—Under date of June 8, 1899, Consul Pickerell, of St. Michael's, reports the arrival of the steamship *Trojan Prince*, with mail from America to the Azores Islands. A number of the business people of the city have expressed their appreciation of the service. The consul continues:

I trust it will not be long before arrangements can be made with the other two Portuguese lines that call here, as I am sure it will materially assist in enlarging our export business.

Postal Cars Wanted in France.—Consul Skinner writes from Marseilles, July 6, 1899:

I am advised that a project of law has been voted in this country upon the suggestion of the Under Secretary of State for the Department of Posts and Telegraphs, providing for the building of sixty-

*The nominal value of the peseta is 19.3 cents; its market value is considerably less.

seven modern postal cars, each 13 meters (42 feet 7 inches) in length. The cars now in use follow a model adopted in 1857, and leave a great deal to be desired. The Government will naturally prefer to have the new cars constructed in this country, but, as the American postal cars have advantages greatly superior to anything known upon the Continent, it may be worth the while of American manufacturers to submit propositions.

Railway Management in Norway.—In answer to inquiries from several correspondents in the United States, Consul Nelson, of Bergen, writes, under date of June 28, 1899, that tenders for railroad supplies for State railroads in Norway should be addressed to Styrelson för Statsbanernas Drift og Anlaeg, Christiania.

Danish Exchange Rate on New York.—Vice and Deputy Consul Blom writes from Copenhagen, July 7, 1899:

As a sure sign of the rapidly increasing business relations between the Kingdom of Denmark and the United States, I have to report that from this date (July 7) the committee for exchange quotations at the Copenhagen Bourse has been instructed by royal decree to quote the rate for three days' sight drafts on New York every Tuesday and Friday. The exchange rate on places in the United States has never before been publicly quoted here.

Exchange at Guadeloupe.—Consul Aymé, of Guadeloupe, under date of June 23, 1899, says:

The Bank of Guadeloupe has again lowered the rate of exchange 2 per cent. The new rates went into effect June 21, and are as follows:

	Per cent.
90 days' sight on Paris	19
60 days' sight on Paris	20
30 days' sight on Paris	21.5
Sight, not to exceed 100 francs	22

The value of the paper franc is therefore nearly 16 cents in United States gold; actually, it is 15.34 cents, as the Treasury rate of 24 per cent is that used in such calculations. Despite the slow but steady fall in exchange and consequent appreciation in the value of the current paper money, prices of nearly all commodities continue to rise, or, at best, remain stationary.

Rice Planting in Uruguay.—Minister Finch transmits from Montevideo, under date of May 30, 1899, the following letter published in a local paper, showing the surprising yield of rice in the department of Rivera:

The first planting of rice by Mr. Juan Lemos was 1½ kilograms (3.3 pounds), which yielded 150 kilograms (331 pounds), a profit of 100 to 1. A sample of the rice has been inspected and is pronounced to be of the best quality. Encouraged by this splendid result, Mr. Lemos will extend his plantations next year. If the enthusiasm for national production spreads, the department of Rivera will, from its soil and climatic conditions, become one of the richest in the country.

Coal Trade of Montevideo.—Minister Finch writes from Montevideo, May 30, 1899, that the shipments to Montevideo of coal during the first quarter of the year 1899 amounted to 75,610,672 kilograms (74,416 tons).

Dominican Duties Payable in Gold.—The Department has received a report from Consul-General Maxwell, dated Santo Domingo, June 24, 1899, to the effect that the Dominican Congress has passed an act making the import duties payable in United States gold or in the current money of the Republic at the rate of $6 for $1 gold; formerly, the rate was two for one. The act takes effect July 1, 1899.

Municipal Taxes in Madagascar.—Consul Gibbs, of Tamatave, under date of May 3, 1899, says:

Referring to my report dated February 3 last, relative to the temporary putting into execution of the regulations for the formation of an "octroi de mer" in the colony of Madagascar,* I have to state that a decree of the governor-general has repealed this law by instructions from the French Minister of Colonies. The decrees establishing a municipal tax on goods imported into Tamatave, Majunga, Vatomandry, Diego-Saurez, and Mananzary will continue to be enforced without interruption.

United States Trade with Mauritius.—Consul Campbell writes from Port Louis, May 13, 1899, that American commerce has contributed largely to the customs duties of the colony for the quarter ended March 31, 1899. The customs receipts for the first three

*See CONSULAR REPORTS No. 226 (July, 1899), p. 527.

months of 1898 amounted to 170,000 rupees ($52,700),* and during the same period of this year to 300,000 rupees ($93,000). United States trade with the island has contributed to the above the amount of 87,206 rupees ($27,033) in export duties alone.

Exhibition in Constantinople.—Consul-General Dickinson, of Constantinople, under date of June 17, 1899, transmits the following clipping from the Oriental Advertiser, of that city:

AN AGRICULTURAL EXHIBITION IN CONSTANTINOPLE.

With the object of encouraging agricultural enterprise as much as possible, the Imperial Government has decided to organize a permanent agricultural exhibition in Constantinople. It will be installed in the premises of the Yildiz Relief Exhibition, which is empty at present, but which will be reopened in the month of August. The new exhibition will contain two sections—one for cultivated plants and the other for domestic animals. Agricultural implements of the latest American and other inventions will also be exhibited. The use of such machinery and implements will be taught to agriculturists by Americans who will be specially engaged by the Government.

An imperial iradé commands the Ministry of Agriculture to lay before the Council of Ministers all measures that are likely to lead to the progress of agriculture and the improvement of the breed of cattle.

Art Exhibition in Antwerp.—Consul-General Lincoln writes from Antwerp, under date of June 9, 1899, that an exhibition of the works of Van Dyck is to be held in that city beginning with August 12. There will be a loan collection from various galleries in Europe, and the event will be celebrated by a festival. The programme of the festival, transmitted by Mr. Lincoln, has been filed for reference in the Department of State.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
E. Schneegans, Saigon	May 9,1899	Rice market	Department of Agriculture.
Do	May 23,1899	....do	Do.
Do	June 6,1899	....do	Do.
I. B. Myers, St. John, N. B.	July 20,1899	Dairying in foreign countries.	Do.
D. J. Vail, Charlottetown	....do	....do	Do.
W. H. H. Graham, Winnipeg.	Aug. 8,1899	....do	Do.
Do	Aug. 3,1899	Crop report	Do.

*Taking the market value of the rupee at 31 cents.

FOREIGN REPORTS AND PUBLICATIONS.

New Openings for Trade in Russia.—The following is summarized from the British Trade Journal, London, July 1, 1899:

The industrial, mining, and commercial development of Russia is progressing more rapidly than agriculture and attracting, year by year, a larger amount of capital and energy. Still, the agricultural interests maintain a degree of importance in the national life that may be estimated by the fact that not more than 5 per cent of the Russian people are even now wholly dependent upon industry in any of its forms for their livelihood.

Drawing upon her own resources for labor, food, and raw material, industrial Russia is affected by the peculiar social and economic conditions of the districts from which these supplies are obtained. The great majority of the Russian peasants are occupied on their farms for the summer half of the year; but during the winter months, when agricultural work is impossible, they flock to the industrial centers in search of occupation. The rate of industrial wages falls, therefore, from 25 to 50 per cent, and, in consequence, many factories are partly or altogether closed from April until October, working, however, at high pressure from October until April. The machinery employed has in these cases to accomplish in six months what, under more normal conditions, would have been spread over the entire year. Another fact to be borne in mind is that a great part of this machinery must be worked by half-skilled labor and must often require considerable modifications.

Since the emancipation of the serfs, the peasant population has vastly increased and they are more and more dependent upon the proceeds of their labor upon the landowners' estates. This abundance of cheap labor, of course, affects the demand for agricultural machinery. There has been a tendency of late years for the peasantry to form associations, or "artels," purchasing agricultural implements of various kinds, and making special contracts for plowing, sowing, or reaping a certain number of acres, afterwards thrashing and storing the corn. They are aided by the zemstva and various local bodies with loans at a low rate of interest for this purpose. This has created a demand for special implements the price of which is not beyond the reach of the peasants, and of such simple construction as to be suitable for districts in which technical skill, either for working or repairing the machine, is absolutely unobtainable. In general, agricultural implements must, both in price and in the form of their construction, be within reach of the peasantry. This trade is almost exclusively in the hands of German and Belgian manufacturers. They also supply the demand for appliances of many kinds used in drying and preserving vegetables and fruits, tools for cleaning them, knives of a special form for cutting them into the shape desired, and stoves for drying them to the exact degree required. The severity of the Russian winters renders the whole Russian people dependent upon dried or preserved vegetables and fruits for more than half the year. At this moment, Russian dried vegetables are equal to those of Germany in every way.

Many Belgian and German firms have adopted a system which might be advantageously followed by others. Working models of agricultural implements suitable

for peasant use, but in their complete form beyond their reach on account of their price and the difficulty of transport, are sent to the country bazaar. Agents supply the absolutely essential parts in iron or steel, leaving the peasants to construct the whole machine in wood; full instructions, accompanied by drawings, are supplied with the parts sold, and in many instances cut-out paper patterns are given of the exact size of the portions which the peasants have to construct for themselves. The machines made in this way are, of course, inferior to what would have been sent out by regular manufacturers, but they are within the peasants' purchasing power, and often hundreds of parts of machines and implements are sold in this way in districts within which in a complete state they would have found no purchasers.

The cheapness of labor in the rural districts is forcing the landowning class to the development of new industries. Spinning and weaving factories are erected on many estates, sometimes worked by the peasantry upon the cooperative system, in conjunction with the proprietor. In the same way an immense number of other industries are springing up, such as shoemaking, saddlery, tailoring, furniture and cabinet making, the production of small objects in metal, such as locks, candlesticks, traps, etc. Cutlery is a very important branch of trade, while the manufacture of the national samovar is almost exclusively in the hands of the peasants. All over Russia woolen stocking and glove knitting is now carried on with the use of simple and inexpensive machines, largely imported from abroad. All these trades call for an immense variety of subsidiary products of all kinds. The village industries are warmly supported by the zemstva and the local governments.

Importers of Russian rural produce, who should arrange to purchase that produce direct from the producer, would certainly meet with the hearty cooperation of the zemstva in developing the importation of British machinery and appliances, as such imports would really be paid for by the agricultural and country products which the peasants are able to sell.

Gold in the Philippines.—From the London and China Telegraph, London, July 10, 1899, the following is taken:

Filipinos have proved about as indifferent to the mineral wealth of their islands as the Boer farmers of the Transvaal to the riches lying beneath the surface of the ground. Consequently, the Philippines present a tempting enough field to British enterprise, which, indeed, has already struck root in the islands—notably on the shores of Paracele Bay, in Luzon, where with skilled labor and modern methods it has given an earnest of what may be expected in the future. Paracele gold is well known in Manila, but few Manilese even know where Paracele is, and fewer still have ever visited the place.

To the question, "How is it that so little is known of Philippine gold?" the simple answer is that hitherto there has been no official control of the output, and, strange to say, no tax upon it. The miners live in isolated districts and villages, with rare communication between them; and the universal man of business is the omnipresent Chinaman, who knows much better than to swagger over the volume of his gold trade. But, apart from Paracele—which may be said to be the Ballarat, if not the Klondike, of the Philippines—gold is also found in many other islands of the group—in Cëbu, Mindoro, Panaon; whilst Mindanao itself is the center of a considerable trade in alluvial gold. The most serious impediment to mining in the Philippines is the utter absence of practicable roads; but this is a drawback that does not apply to Paracele, the headquarters of British gold enterprise in the Philippines (the Philippine Minerals Syndicate), as the reefs are close to the sea, and heavy

machinery can be taken in sea-going vessels to within 1,000 yards of where it is wanted. Hitherto, the mining laws and regulations obtaining in the Philippines were those that were in force in Spain—the unit of mining concession being a parallelogram 300 meters by 200 meters, or a superficial area of about 15 acres. But there is reason to believe that under American dominion the conditions of mining will be made much more favorable, and that Luzon will become an important center in the gold industry of the world.

Irrigation in the Sudan.—The London Times of June 16, 1899, says:

Sir W. E. Garstin has presented a copious and interesting note as the result of his recent visit to the Sudan. Describing how the main stream of the Nile loses itself in the immense swamp area lying between Shambeh and Lake No, he suggests, if the summer water supply is to be increased, that the lost river should be formed into a river again by confining the water to one main artery, thus preventing the immense loss from evaporation in the swamps, a loss approximately estimated at 386 cubic meters per second. The swamp area when drained would provide an immense basin available as an escape for any excess water, besides providing Egypt with the much-needed power of controlling the Nile in flood. With canal and basin irrigation applied to the Blue Nile, Sennar and the southern portion of Khartum province might become one of the finest wheat-producing areas in the world, and, by means of the proposed railway connecting Abu-Harraz, Gedaref, and Kassala with the Red Sea, might compete successfully with India. But the scarcity of population, the cost of transport, and the unhealthiness of the country are serious obstacles to any large outlay upon public works.

Between Khartum and Berber the upper Egypt irrigation system, by a series of large basins on either side of the river, might be introduced gradually and be extended as the population returned to this now desolate region. Meanwhile, pumping stations here and on the Blue Nile would materially assist the return of prosperity.

The note insists on the necessity that all important irrigation schemes over the entire area watered by the Nile and its tributaries should be referred to Cairo, as otherwise Egypt might some day be in the same position for water supply as if the Sudan were held by an unfriendly power.

The vast forests extending from the upper part of the Blue Nile to Abyssinia, as also in Bahr-el-Ghazal province, are an undeveloped source of wealth, but are being felled wastefully, and it is recommended that an Indian forestry officer should be appointed to examine them scientifically. The belt adjacent to the river is becoming reduced as the gum trees and other valuable trees are being felled for fuel.

Progress must be very slow, and for a long time the administration of the Sudan will constitute a heavy drain on the Egyptian treasury. One of the main difficulties is the depopulation. A generation will probably be required to restore the population to even moderate limits, and possibly half a century will pass before it becomes as dense as it was prior to Muhammed Ali's invasion in 1820. Another difficulty is the extreme unhealthiness of the climate south of Khartum, with the indolent character of the natives, whose wants are extremely few and who, accustomed to having all cultivation and manual labor performed by black slaves, are not very likely soon to change their nature.

Gold-Mining Machinery in the Transvaal.—A report by the Belgian consul-general at Pretoria is quoted in the British Trade Journal, London, July 1, 1899, as follows:

Many tools and machines are used in the Transvaal in gold mining which could be supplied by Belgium, where similar plant is made. Amongst such apparatus may be mentioned: (1) Tandem compound winding engines of variable expansion, especially suitable for raising ore from great depths; (2) steel vats or pans; (3) joists, plain and trussed, and cast-iron pillars; (4) rails and trucks; (5) motors for stamp batteries and machine shops. All European firms that have hitherto succeeded in doing good business with Witwatersrand have not only opened a commercial agency there, but also technical offices and a store holding stocks of all the lines in current demand.

Woods and Furniture in Russia.—The British Trade Journal, London, July 1, 1899, quotes from a report of the French consul-general at Moscow, as follows:

Cheap furniture is made chiefly in Russia by the peasants in the long winter months, when agricultural labor is suspended. Better-made and high-class furniture is manufactured either in the large cities or imported from abroad, Germany, Austria, and England sending considerable quantities. Foreign woods—such as cabinetwork woods, rosewood, mahogany, lignum-vitæ—were imported last year to the extent of 389,400 poods (14,062,013 pounds), the values being over 1,000,000 francs ($193,000) for Germany; Brazil, 50,000 francs ($9,650); Great Britain, 175,000 francs ($33,775); and Persia, 400,000 francs ($77,200). These figures show a tendency to increase, owing to the development of business and the growing numbers of well-to-do persons. The customs duties on exotic woods—such as lignum-vitæ, cedar, cypress, mahogany (excepting that from Honduras), walnut, violet wood, palm wood, and scented woods of all kinds in beams, logs, and planks—are 12 copecks (2.3 cents) per pood (36.112 pounds). Woods of all kinds in veneer, not exceeding one-quarter of an inch thick, pay 75 copecks (14.4 cents) per pood. Moscow and St. Petersburg are the chief manufacturing centers for high-class furniture, but mention must also be made of Kief, Odessa, and Kharkof.

CONTENTS.

		Page.
I.—Canadian Competition in Great Britain	*Boyle*	189
II.—American Cattle and Fresh Beef in Belgium and Germany	*Mason*	196
III.—Importation of Meat into France	*Gowdy*	199
IV.—United States Fruit and Fruit Waste in Germany	*Pettit*	200
V.—German View of American Agricultural Exports	*Hanauer*	202
VI.—United States Exports to Germany	*Stern*	203
VII.—Germany in 1898	*Monaghan*	205
VIII.—Efforts to Increase German Exports	*Hanauer*	206
IX.—German Chambers of Commerce	*Hanauer*	207
X.—German Zinc Exports to the United States	*Erdman*	210
XI.—Commercial Policy of Hungary	*Chester*	210
XII.—Silk Trade in Lyons	*Covert*	211
XIII.—French Market for American Iron	*Brittain*	213
XIV.—Competition with American Copper	*Halstead*	214
XV.—Aluminium in Great Britain	*McFarland*	215
XVI.—Manufacture and Use of Wood Flour in Germany	*Mason*	216
XVII.—Manufacture and Use of Wood Flour in Scotland	*Taylor*	217
XVIII.—Electric Street-Car System of Hamburg	*Pitcairn*	218
XIX.—Exposition at Ghent	*Le Bert*	222
XX.—Imports of Cotton Goods from Manchester	*Grinnell*	224
XXI.—Egg Industry in Germany and Russia	*Winter*	225
XXII.—Advice to Importers of Sicilian Essential Oils	*Caughy*	225
XXIII.—Petroleum Industry in Russia	*Holloway*	226
XXIV.—Textile Plants in Russia	*Atwell*	227
XXV.—Russia's Flax and Hemp Crops of 1898	*Holloway*	230
XXVI.—Failure of Crops in Southern Russia	*Heenan*	231
XXVII.—French Wheat Crop of 1899	*Atwell*	232
XXVIII.—Transportation from Marseilles	*Skinner*	233
XXIX.—Uses of Tobacco Juice in France	*Van Buren*	236
XXX.—Measures Against the Plague at Marseilles	*Skinner*	238
XXXI.—The Plague Situation in Egypt	*Skinner*	239
XXXII.—Trade Conditions in Persia	*Monaghan*	240
XXXIII.—Congress of Charity at Paris		242
XXXIV.—Report of French Steamship Line	*Thackara*	243

		Page.
XXXV.—Life-Insurance Companies in Germany	*Harris*	244
XXXVI.—Business Firms in Bergen	*Nelson*	245
XXXVII.—Anchovies in Scandinavia	*Nelson*	249
XXXVIII.—Cacao Culture in Ecuador	*DeLeon*	250
XXXIX.—Proposed Port at Montevideo	*Finch*	261
XL.—Foundry at Monterey	*Pollard*	265
XLI.—Manganese Mining in Bahia	*Furniss*	266
XLII.—Mining and Railway Concession in Venezuela	*Plumacher*	269
XLIII.—Customs Classification in Venezuela	*Plumacher*	269
XLIV.—Foreign Corporations in Venezuela	*Loomis*	271
XLV.—Venezuelan Pearl Fisheries	*Loomis*	272
XLVI.—Provisional Customs Regulations of Kyao-chau	*Conger*	273
XLVII.—Customs Regulations and Fees in Japan	*Buck*	277
XLVIII.—Operation of Japanese Treaties	*Buck*	285
XLIX.—Foreign Companies in Japan	*Buck*	288
L.—Japanese Regulations Relating to Foreigners	*Buck*	289
LI.—Tonnage Dues Law in Japan	*Buck*	292
LII.—Japanese Diplomatic and Consular Officers	*Buck*	293
LIII.—Trade on the West River of China	*Wildman*	295
LIV.—Chefoo Trade in 1898	*Fowler*	296
LV.—Trade Conditions in Indo China	*Covert*	308
LVI.—Cinchona Bark and Quinine in Java	*Everett*	310
LVII.—Progress in New Caledonia	*Wolff*	313
LVIII.—American Fruits in the Orient	*Johnson*	313
LIX.—American Candy in South Africa	*Stowe*	315
LX.—Boots and Shoes in Lourenço Marquez	*Hollis*	316
LXI.—Commercial Development of South Africa	*Stowe*	317
LXII.—Broom Factory in the Transvaal	*Macrum*	325
LXIII.—National Debt of China	*Ragsdale*	326
LXIV.—National Debts	*Ragsdale*	329

LXV.—Notes (A New Textile Plant—Salmon Fisheries in Norway—New City and Port in Northern Russia—New Ports Opened in Japan—American-Asiatic Association of Japan—Petroleum in Dutch India—Notes from Dawson City—Collection of Customs in Canada—Bonds in Guatemala—Import of Silver Coins into Salvador—Venezuelan Duties on Tobacco—Brazilian Tax on Letters Rogatory—Fruits in Honduras—German Trade with Uruguay—German Schools in Foreign Parts—Artificial Paving Stones in Germany—American Horses in Germany—Plague in Persia—Proposed Steamship Line to New Caledonia—Hog Meat in Singapore—Tinware in South Africa—Electric-Railway Project in France—Electric Tramways in Nice—Street Railways in Frankfort—Railways in the

Page.

Transvaal—Contract for Railway in Peru—Work on Guayaquil Railway—Proposed Portuguese Exhibition in South America—Flour in Guatemala—Waterworks at Tampico—Demand for Automatic Lawn Mowers and Incubators—Inquiry for Iron and Steel in Belgium—Failures of Norwegian Paper Mills—Operation of Japanese Copyright Law—Consular Reports Transmitted to Other Departments)..... 330

LXVI.—FOREIGN REPORTS AND PUBLICATIONS (Markets of Siberia—Agriculture and Trade in Tunis—Commercial Movement of Cypress—Trade of British New Guinea—Commerce of the Gold Coast—Nicaraguan Trade in 1898)..... 344

REPORTS BY COUNTRIES.

	Page.
AFRICA, SOUTH:	
American candy in	315
Commercial development of	317
Tinware in	339
BELGIUM:	
American cattle and beef in	196
Demand for automatic lawn mowers and incubators in	342
Exposition at Ghent	222
Inquiry for iron and steel in	342
BRAZIL:	
Manganese mining in Bahia	266
Tax on letters rogatory in	336
CANADA:	
Collection of customs in	334
Notes from Dawson City	333
CHINA:	
American fruits in	313
Chefoo trade in 1898	298
National debt of	326
Provisional customs regulations of Kyao-chau	273
Trade on the West River of	295
CHINA, INDO:	
Trade conditions in	308
ECUADOR:	
Cacao culture in	250
Work on Guayaquil railway	341
EGYPT:	
The plague situation in	239
ENGLAND:	
Competition with American copper	214
Imports of cotton goods from Manchester	224
EUROPE:	
National debts	329
FRANCE:	
A new textile plant	330
Congress of charity at Paris	242
Electric-railway project in	340
Electric tramways in Nice	340
Importation of meat into	199
Market for American iron	213
Measures against the plague at Marseilles	238
Report of French steamship line	243
Silk trade in Lyons	211

FRANCE—Continued. Page.
Transportation from Marseilles 233
Uses of tobacco juice in 236
Wheat crop of 1899 232
GERMANY:
American cattle and fresh beef in 196
American horses in 338
Artificial paving stones in 337
Chambers of commerce of 207
Efforts to increase exports of 206
Egg industry in 225
Electric street-car system of Hamburg 218
German view of American agricultural exports 202
In 1898 205
Life-insurance companies in 244
Manufacture and use of wood flour in 216
Schools in foreign parts 337
Street railways in 340
Trade with Uruguay 336
United States exports to 203
United States fruit and fruit waste in 200
GREAT BRITAIN:
Aluminium in 215
Canadian competition in 189
GUATEMALA:
Bonds in 335
Flour in 342
HONDURAS:
Fruits in 336
HUNGARY:
Commercial policy of 210
INDIA:
Petroleum in Dutch 333
ITALY:
Advice to importers of Sicilian essential oils 225
JAPAN:
American-Asiatic Association of 332
Customs regulations and fees in 277
Diplomatic and consular officers of 293
Foreign companies in 288
New ports opened in 332
Operation of copyright law in 343
Operation of treaties of 285
Regulations relating to foreigners in 289
Tonnage dues law of 292
JAVA:
Cinchona bark and quinine in 310
LOURENÇO MARQUEZ:
Boots and shoes in 316
MEXICO:
Foundry at Monterey 265
Waterworks at Tampico 342

	Page.
NEW CALEDONIA:	
Progress in	313
Proposed steamship line to	339
NORWAY:	
Anchovies in Scandinavia	249
Business firms in Bergen	245
Failures of paper mills in	342
Salmon fisheries in	330
PERU:	
Contract for railway in	341
PERSIA:	
Plague in	338
Trade conditions in	240
RUSSIA:	
Egg industry in	225
Failure of crops in southern	231
Flax and hemp crops of 1898	230
New city and port in northern	331
Petroleum industry in	226
Textile plants in	227
SALVADOR:	
Import of silver coins into	335
SCOTLAND:	
Manufacture and use of wood flour in	215
SOUTH AMERICA:	
Proposed Portuguese exhibition in	341
STRAITS SETTLEMENTS:	
Hog meat in Singapore	339
TRANSVAAL:	
Broom factory in the	325
Railways in the	341
UNITED STATES:	
German zinc exports to	210
URUGUAY:	
Proposed port at Montevideo	261
VENEZUELA:	
Customs classification in	269
Duties on tobacco in	335
Foreign corporations in	271
Mining and railway concessions in	269
Pearl fisheries in	272

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

The fact that the market exchange value of foreign coins differs in many instances from that given by the United States Treasury has been repeatedly called to the attention of the Bureau of Foreign Commerce. An explanation of the basis of the quarterly valuations was asked from the United States Director of the Mint, and under date of February 7, 1898, Mr. R. E. Preston makes the following statement:

"When a country has the single gold standard, the value of its standard coins is estimated to be that of the number of grains fine of gold in them, 480 grains being reckoned equivalent to $20.67 in United States gold, and a smaller number of grains in proportion. When a country has the double standard, but keeps its full legal-tender silver coins at par with gold, the coins of both gold and silver are calculated on the basis of the gold value.

"The value of the standard coins of countries with the single silver standard is calculated to be that of the average market value of the pure metal they contained during the three months preceding the date of the proclamation of their value in United States gold by the Secretary of the Treasury. The value of the gold coins of silver-standard countries is calculated at that of the pure gold they contain, just as if they had the single gold standard.

"These valuations are used in estimating the values of all foreign merchandise exported to the United States. The value of the Indian rupee, although calculated according to law at the value of the pure metal contained therein, has a commercial value above the value of the silver bullion; consequently the value for customs purposes is determined in each case by the consular certificates attached to the invoice of exports from that country to the United States."

The following statements, running from January 1, 1874, to July 1, 1899, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account

that the ruble of Russia, for instance, fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, 1882, and 1891–95 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S.gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
British Honduras.....	.....do	.....do	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon..	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso (60 cents).
Denmark.....	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Uruguay	Gold	Peso.....	1.03,4	Gold—peso: silver—peso and divisions.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed.

† The gold standard was adopted October 1, 1892. (See CONSULAR REPORTS No. 147, p. 623.) Values are still, however, frequently expressed in the florin or gulden, which is worth 2 crowns or 40.6 cents.

‡ Gold standard adopted October 1, 1897. (See CONSULAR REPORTS No. 201, p. 259.)

§ See note to table of fluctuating currencies.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896-97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; bolivi-ano there-after.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; bolivi-ano there-after.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1896.				1897.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3	$0.41,2
Central America.	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3	.41,2
China	Amoy tael				.79,3	.76,7	.75,7	.71,7	.66,4
	Canton tael				.79	.76,5	.75,5	.71,5	.66,4
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6	.63,7
	Chinkiang tael				.77,4	.74,9	.73,9	.70	.65,1
	Fuchau tael				.73,3	.70,9	.70	.66,3	.61,6
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1	.67,8
	Hankau tael				.74,2	.71,7	.70,8	.67,1	.62,3
	Ningpo tael				.76,2	.73,7	.72,8	.68,9	.64
	Niuchwang tael.				.74,3	.71,9	.71	.67,2	.62,5
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5	.60,8
	Swatow tael				.73,2	.70,8	.69,9	.66,2	.61,5
	Takao tael				.79,8	.77,2	.76,2	.72,2	.67
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5	.64,6
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Ecuador	do.	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1	.19,6
Japan	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5		
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2	.44,6
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2	.07,6
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Russia	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4		
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2				

Countries.	Monetary unit.	1898.				1899.		
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.
Bolivia	Silver boliviano.	$0.42,4	$0.40,9	$0.41,8	$0.43,6	$0.43,9	$0.43,4	$0.44,3
Central America	Silver peso	.41,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
China	Amoy tael	.68,5	.66,2	.67,6	.70,6	.71	.70,2	.71,6
	Canton tael	.68,3	.66	.67,4	.70,4	.70,8	.70	.71,4
	Chefoo tael	.65,5	.63,3	.64,6	.67,5	.67,9	.67,2	.68,4
	Chinkiang tael	.66,9	.64,6	.66	.69	.69,3	.68,6	.69,9
	Fuchau tael	.63,4	.61,2	.62,5	.65,3	.65,6	.65	.66,2
	Haikwan tael	.69,7	.67,3	.68,8	.71,8	.72,2	.71,4	.72,8
	Hankau tael	.64,1	.61,9	.63,2	.66	.66,4	.65,7	.67
	Ningpo tael	.64,3	.63	.65	.67,9	.68,2	.67,5	.68,8
	Niuchwang tael.	.65,9	.62	.63,4	.66,2	.66,5	.65,9	.67,1
	Shanghai tael	.62,6	.60,4	.61,7	.64,5	.64,8	.64,1	.65,4
	Swatow tael	.63,3	.61,1	.62,4	.65,2	.65,5	.64,9	.66,1
	Takao tael	.66	.66,6	.68	.71	.71,4	.70,7	.72
	Tientsin tael	.66,4	.64,1	.65,5	.68,4	.68,8	.68	.69,4
Colombia	Silver peso	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
Ecuador	do.	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3
India *	Silver rupee	.20,1	.19,1	.19,9	.20,7	.20,8	.20,6	.21
Japan	Silver yen							.49,8
Mexico	Silver dollar	.46	.44,4	.45,4	.47,4	.47,7	.47,2	.48,1
Persia	Silver kran	.07,8	.07,5	.0977	.08	.08,1	.08	.08,2
Peru	Silver sol	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3

*The commercial value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Kwan	Japan	8.28 pounds.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,430 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	...do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	...do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	...do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	...do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

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CANADIAN COMPETITION IN GREAT BRITAIN.

The statistics of the British blue book on trade for 1898 (recently issued) present two striking facts—that the notable increase in American imports last year was chiefly in manufactures, and that Canada is the leading competitor of the United States in forest and farm products. This Canadian competition in the British market is now keener than it ever was, and American farmers and shippers would be wise to appreciate the fact that the outlook is that it will increase. That there should be competition is inevitable, owing to the similarity of the natural and farm productions of the United States and Canada and the equidistance of the two countries from this market. But during the past two years the Canadian trade has been given a great impetus through the operation of a system of Government supervision and subsidies. Possibly influenced by the Canadian example, Russia is shortly to introduce the experiment of subsidizing a cold-storage service on ships bringing dairy products to Great Britain, and already Russia sends enormous quantities of these products to this market.

In the annual for 1899 of the British Cooperative Wholesale Societies (which do a yearly business of $60,000,000) there is a long article on Canada and its productions, from which is taken the following statement of the official efforts that are being made to increase the sale of Canadian produce in Great Britain:

It is a Government enterprise, and is uniqre in the history of governmental connection with trade. The plant for two yeais past has been worked from the Department of Agriculture at Ottawa. Its object is not only to increase the demand

in Great Britain for Canadian cheese, butter, eggs, poultry, and fruit, but to so improve the means of transportation by rail and sea that these Canadian products shall be sent into market in the best possible condition and in the most attractive form. The scheme even goes beyond this; for another of its aims is to steadily improve the grade of all produce sent to Great Britain, and thus secure for Canadian produce a good and abiding reputation.

To secure these advantages, the Department of Agriculture in the first place sent out its experts to aid in the establishment of creameries. It has also informed Canadian farmers of the kind of produce most in demand in Great Britain, and its experts have instructed farmers how to kill and dress poultry for shipment to Great Britain, and how to prepare and pack other farm produce intended for the British market. It has supplemented this work by agreements with the Canadian railway companies and with the ocean steamship companies for the carriage of these goods in cold storage. During the export season every Canadian railway company reaching tide water by its own line or by its connections runs at least one cold-storage car every week from the inland terminus of its line. The farmers shipping produce in the car pay the railway charges; but the Government guarantees to the railway company two-thirds of a carload of produce. By doing so, it secures regularity and continuity of service. At the ports the Government provides cold-storage warehouses for the reception and storage of produce, until it can be carried on shipboard.

In order to induce the steamship companies to go into the scheme, the Government paid one-half of the cost of fitting up nearly a score of steamers with cold-storage chambers. In return for this assistance, the steamship companies have agreed to carry produce in cold-storage at the current freight rates with an extra charge of 10s. ($2.43) a ton for cold-storage service and accommodation. These agreements run for three years. At the time of writing, the second season is about to open. If it is attended with as much success as was the season of 1897, there will be reason for thinking that the expectations of the Agricultural Department will be realized, and that after a three years' experiment the trade will become established and will have increased so much that it will be no longer in need of any Government help, nor of the great attention and close oversight that it has hitherto had from the Department of Agriculture.

The above-described system of Government encouragement has been extended by a money grant for every creamery in which there would be kept in use a refrigerating room according to official plans and specifications, the subsidy being $50 for the first year and $25 each year for two additional years.

Following are some suggestions made by the Canadian Minister of Agriculture in regard to shipments of farm produce to the British markets, which will undoubtedly be of value to exporters of similar produce from the United States:

Cheese.—Care should be taken that it is not landed in Great Britain in a heated condition. The curing rooms should be kept continuously at a temperature of between 60° and 65°, and the cheese should be carried in the steamships in ventilated cold-storage compartments.

Butter.—To prevent butter from getting "flat and stale," a harmless preservative should be used. (It should be noted, however, that

Parliamentary action against the use of "preservatives" is contemplated.)

Bacon.—Soft or fat bacon is objected to and does not bring such a good price as firm and lean bacon.

Eggs.—To prevent a "mussy" condition and to insure their keeping well, eggs should be delivered in a cold condition to the steamship and carried across in cool, ventilated chambers.

I have several times pointed out in CONSULAR REPORTS that there was a great opening in British markets for American poultry and fruits. The Canadian Government has taken hold of the matter. Several experimental shipments of Canadian poultry and fruits have been made and have been fairly successful, and the trade in both products is to be pushed. The Canadian authorities recommend that turkeys and chickens should be well fattened just before being killed. Recently a Liverpool poulterer showed me some frozen chickens from New Zealand.

The English are very fond of honey, and their home product is excellent. Under the auspices of the Colonial Government, a trial shipment of honey was sent to Liverpool from Ontario. The result is officially reported as follows:

> It met with a ready sale, created a growing demand, and has been followed by the shipment of several carloads, which are reported to have been sold at prices entirely satisfactory to the shippers.

There is no doubt that American honey could also find a good market here. The Canadian product is attractively put up in glass bottles. I notice that one brand of Canadian honey sold in Liverpool is labeled "Preferential-tariff brand."

Attempts to create a market for Canadian maple sirup have not been successful. It is said that English people do not care for the article, and confectioners over here say that they can get almost similar results by using common brown sugar with a maple-flavor extract. There is an English preparation labeled as maple sugar, but it is horrible stuff. Americans resident in England have maple sirup sent them direct, and my observation is that their English friends to whom samples are given pronounce it delicious.

The trade with Liverpool in Canadian fresh meat brought over in refrigerators is less than two years old. Those interested in the American trade are not apprehensive that it will have a material competitive effect—at least for some years. Still, it is growing. But American beef, both chilled and on the hoof, holds the palm in this market, it now being conceded to be equal to the best English. Both the United States and Canada have to meet in this market an active and growing rivalry in live cattle and chilled mutton from the

Argentine and in frozen mutton from New Zealand. The Canadian Cattle Breeders' Association has advised its members to pay more attention to shipping chilled beef, rather than to sending live cattle to be slaughtered at Liverpool and London.

The exportation of Canadian butter to Great Britain has greatly fluctuated. It reached its highest figures in 1881, when the value was $3,333,419; from then, against European competition (particularly Danish), it gradually declined until 1889, when the value was only $174,027; after 1889 the trade revived, but has not had a regular growth. Its present development dates from 1897, when, under the stimulus of governmental instruction in manufacture, shipment, etc., and subsidized cold-storage steamers, it jumped up to $1,912,389, as compared with $893,053 in 1896.* In 1898 the value was $1,915,550.

The Canadian cheese trade has been one of steady growth. In 1868 the value of the exportations to Great Britain was only $548,574; in 1880, $3,772,769; in 1897, $14,645,859; and in 1898, $17,522,681.

These figures, both as to butter and cheese, are taken from the last report of the Canadian Minister of Agriculture, covering the fiscal year ended June 30, 1898.

From the same authority is taken the following table, showing the rapid growth of Canadian farm products exported, and, speaking roundly, over 90 per cent of these exportations were to Great Britain:

Articles.	1896.	1898.	Increase.
			Per cent.
Wheat	$5,771,521	$17,313,916	200
Flour	718,433	5,425,760	655
Oats	273,861	3,041,578	1,010
Oatmeal	364,655	554,757	52
Pease	1,299,491	1,813,792	39
Cattle	7,082,542	8,723,292	23
Cheese	13,956,571	17,572,763	25
Butter	1,052,089	2,046,686	94
Pork, bacon, and hams	4,446,884	8,092,930	82
Eggs	807,086	1,255,304	55

Following is a table which shows the value of the leading Canadian importations into Great Britain, with the value of the same kind of products from the United States, for the years 1894, 1897, and 1898. The figures are taken from the British blue book.

* The consul is not responsible for the discrepancies in the value of butter and cheese apparent in this report. These are chiefly due to the contradictory figures given by the Canadian and British authorities. It should be borne in mind that the figures for Canadian exports are for fiscal years, while those for imports into Great Britain are for calendar years. This, however, can not reconcile the strange difference in the cheese figures, viz, exports from Canada in 1897, $14,645,859; imports into Great Britain, $16,278,574; increase, $1,632,715; exports from Canada in 1898, $17,572,763; imports into Great Britain, same year, $14,306,503; decrease, $3,266,260.

Value of imports into Great Britain.

Articles and whence imported.	1894.	1897.	1898.
Apples, raw:			
From United States	$2,129,234	$2,443,228	$1,954,298
From Canada	1,541,368	1,355,643	2,179,782
Bacon:			
From United States	24,703,141	26,018,612	31,289,841
From Canada	2,553,701	2,542,727	4,838,737
Beef, fresh:			
From United States	18,109,997	22,400,371	22,632,314
From Canada	476	55,870	1,682,169
Butter:			
From United States	612,102	3,079,048	1,386,601
From Canada	437,988	2,162,029	3,217,004
Cheese:			
From United States	7,816,848	6,867,563	4,892,907
From Canada	13,068,277	16,278,574	14,306,503
Eggs:			
From United States	126,034	205,806	325,717
From Canada	450,249	942,830	1,223,310
Fish:			
From United States	2,000,079	3,482,593	2,983,276
From Canada	3,074,844	3,571,448	4,278,695
Hams:			
From United States	12,787,981	16,580,176	17,745,872
From Canada	618,464	1,264,921	1,133,701
Hay:			
From United States	3,485,441	471,201	730,419
From Canada	571,905	113,048	146,091
Horses:			
From United States	865,799	3,856,725	3,786,226
From Canada	880,043	1,363,021	863,136
Lard:			
From United States	13,154,333	9,396,007	13,590,056
From Canada	172,938	225,834	331,942
Leather:			
From United States	12,461,137	12,667,133	14,758,901
From Canada	604,190	823,279	886,292
Maize, or indian corn:			
From United States	10,556,036	32,188,897	35,550,584
From Canada	810,074	2,599,359	7,454,020
Oats:			
From United States	59,345	9,299,503	11,131,188
From Canada	122,656	2,157,319	3,412,847
Oatmeal:			
From United States	493,707	1,882,726	2,659,562
From Canada	164,729	214,039	322,738
Oxen and bulls:			
From United States	32,847,976	35,063,616	30,290,003
From Canada	6,394,685	9,735,411	8,428,241
Paper-making materials (principally wood pulp):			
From United States	268,738	294,841	364,101
From Canada	402,607	464,620	832,945
Pease:			
From United States	555,702	820,387	845,134
From Canada	967,509	1,397,230	1,503,149
Seeds, flax or linseed:			
From United States	25,408	776,438	316,570
From Canada	16,222	198,385	761,717
Sheep and lambs:			
From United States	1,675,936	1,323,966	1,067,771
From Canada	1,147,460	464,625	307,569

Value of imports into Great Britain—Continued.

Articles and whence imported.	1894.	1897.	1898.
Wheat meal, or flour:			
From United States	$31,737,010	$34,452,996	$46,026,304
From Canada	2,337,683	3,904,470	5,141,525
Wood:			
Hewn—			
From United States	2,131,868	3,778,995	3,181,375
From Canada	2,918,366	3,861,726	2,551,859
Sawn and split—			
From United States	5,678,749	8,365,041	6,917,762
From Canada	13,914,306	22,619,149	18,551,446
House fittings and joiners' work—			
From United States	1,005,640	2,192,084	2,826,512
From Canada	93,793	207,857	268,174

Undoubtedly, much of the increase in Canada's exportations to Great Britain represents only a gain in transportation—that is, a great deal of American produce is shipped via Canadian ports (Montreal, principally) to Great Britain. This is especially so as to grain. I am informed that a great deal of American cheese (mostly New York creamery) comes here through Montreal and is sold as Canadian cheese. This is done not merely to save freight, but because of the prejudice which "filled" cheese has created in this market against the American product. The American cheese here referred to is equal to the best Canadian, but it can not just now be sold on its merits if known to be American for the reason above stated.

An American doing business in Liverpool in shipping hides from American cattle slaughtered here tells me that he is doing a big trade in sending these hides to Canada to be tanned, the leather being brought back to England. Within six months he shipped in this way 20,000 hides. He says that they can be shipped from Liverpool to Montreal cheaper than they could be carried by rail from Chicago to Montreal.

In addition to the steps taken as above described to increase the sale of Canadian products, high officials from Canada have during the last two years traveled a great deal over Great Britain, making speeches before chambers of commerce and trade organizations, setting forth the claimed merits of Canadian food products. The Dominion has nine or ten agents in the sh Islands who combine some of the functions of a consul with t se of a commercial traveler. These gentleman have samples of farm produce displayed at their headquarters, and they visit agricultural fairs with movable exhibits. Several of the Provinces also have special agents. It is a matter of comment that English newspapers of late have devoted more attention to Canada and Canadian products than was ever before known. All this, of course, has its effect. It tends to pre-

dispose the consumers of Great Britain in favor of Canadian products, and it certainly is an element to be taken into consideration in the competitive battle, although quality and price are overwhelmingly stronger than sentiment in matters of trade, here as elsewhere.

Canadian authorities claim that in 1898 Canada supplied 14 per cent of the total food importations of Great Britain. Some months ago a company was organized with $1,000,000 capital to handle Canadian food products in England. This corporation has made special arrangements at Liverpool for handling Canadian produce, including space and facilities at one of the cold-storage warehouses, said to be the largest in the Kingdom.

Statistics are not yet available as showing the status of British-Canadian trade for the fiscal year ended June 30, 1899; but there can be no doubt that it has made a large increase over 1898. During 1898, there were twenty-three steamers under subsidy contract or agreement with the Canadian Government to provide cold-storage service for the carrying over of butter, cheese, eggs, fruits, and other perishable products to British ports. Since the present summer season has opened a number of ships have been added to the regular Canadian lines, the capacities of some of the old ships have been increased, two or three new regular lines have been established, and the number of "tramps" has grown. From Liverpool alone there have been six additional sailings a month to Canadian ports since January. The subsidy system has been extended. This system may be divided into three classes—(1) for the mails, (2) for cold-storage service, and (3) for miscellaneous cargo. In some cases, the Dominion subsidies are supplemented by the Maritime Provinces. A regular line has been subsidized to Manchester, going through the ship canal, which has an outlet into the Mersey, near Liverpool.

The "boom" in Canadian trade has had its extravagant phases. Among Liverpool shipowners there was never any confidence in the ambitious scheme entered into under contract with the Imperial and Dominion Governments to run 21-knot mail boats between England and Canada. There was no surprise when the contractors recently asked to be relieved of their obligation. Nor was there any general confidence in local shipping circles in the remarkable attempt to run an all-the-year line from Milford Haven (Wales) to Paspebiac, Gulf of St. Lawrence. One of the pioneer ships got locked in the ice for weeks, and since then no more has been heard of the scheme. But it is semiofficially announced that the attempt to establish a fast mail line to Canadian ports to rival the New York service has not been abandoned, and there are what appear to be authoritative intimations that the next attempt—under subsidy from the Imperial

and Dominion Governments—will be by the Canadian Pacific Railroad, which would thus be enabled to take through passengers and freight from Liverpool to Yokohama over its own system the entire distance.

The value of the total imports into Great Britain from the United States in 1898 was $612,662,073, a gain of 28.8 per cent in five years; the value of Canadian imports in 1898 was $99,161,544, a gain of 38.7 per cent in five years. As compared with 1897, the United States made a gain in 1898 of 10.3 per cent, while Canada's gain was 5.8 per cent. It should be kept in mind that the gain by the United States was mostly in manufactures.

The value of the total exports from Great Britain to the United States in 1898 was $138,677,558, a loss of 7.2 per cent in five years; the value of the exports to Canada in 1898 was $28,372,680, a gain of 5.1 per cent in five years. As compared with 1897, the loss of British exports to the United States in 1898 was 24.7 per cent, while the gain in exports to Canada was 11.4 per cent.

JAMES BOYLE,
Consul.

LIVERPOOL, *July 25, 1899.*

AMERICAN CATTLE AND FRESH BEEF IN BELGIUM AND GERMANY.

The latest decree of the German Government affecting American meats was promulgated early in July and took effect on the 15th of the present month. It declares that from that date fresh beef shall not be imported from Belgium into Germany. As Belgium has no surplus home-grown beef supply to export anywhere, it was at once evident that the decree was in reality aimed at American beef and was occasioned by the fact that the Belgian Government, which has for several years past prohibited the importation of live cattle from the United States, has recently rescinded that restriction, leaving the butchers of that country free to import at certain designated ports American cattle for immediate slaughter, and, unless prevented by new regulations, to export the meat thus obtained across the frontier into Germany.

This latest decree is therefore the logical furtherance and fulfillment of a policy upon which the German Government entered in 1894, and which has the following history:

During that year Texas fever prevailed among cattle in certain districts of the United States, and the Agricultural Department at Washington had during several years previously the subject under careful and thorough scientific investigation. One vital point upon

which these studies hinged was whether Texas fever is or is not a bacterial disease. In the former case, it might be asserted that there is great danger of its transmission through flies from fresh-slaughtered beef to live cattle; while, if the view maintained by the Department of Agriculture is correct—namely, that the disease is due to a protozoan parasite and is transmitted, not from slaughtered beef, but from animal to animal by means of cattle ticks—there could be no danger of the introduction of this disease into any foreign country through the medium of fresh beef. Furthermore, if the views of the Department of Agriculture are correct, there is no danger of its introduction even from imported live cattle, since, as a matter of fact, the cattle exported to Europe are not taken from the Texas-fever district in the United States, and, even if they were taken from the Texas-fever district, the danger of infection could be prevented by the removal of the parasites before the cattle leave America.

After a careful scientific study of the subject, the Government experts decided that Texas fever is not a bacterial disease, and therefore not susceptible of transmission by means of slaughtered meat. From this conclusion Dr. F. Billings, a Western State bacteriologist, dissented and published his reasons for considering Texas fever a bacterial disease, a theory which, it may be here remarked, has since been conclusively overthrown. The judgment of the Agricultural Department concerning the nature of Texas fever is now generally accepted by scientific men and has been confirmed by the investigations of a Government commission in Australia, and later by the studies of Professor Koch, the eminent German bacteriologist, which have been made in Africa.

But in 1894, the German Government, assuming the disease to be of a bacterial nature and therefore transmissible by the meat of diseased cattle, issued, on November 10 of that year, a decree forbidding the importation into Germany of live cattle or fresh beef of American origin, and this prohibition has since been rigidly maintained.

Belgium, Denmark, and other neighboring countries followed the lead of Germany in this policy, and American cattle and their flesh in a fresh, uncured state were practically excluded from continental Europe. Great Britain, however, took measures to ascertain that there was no real danger from Texas fever and continued to permit the importation of American cattle and cold-storage beef, with the result that the British public has enjoyed for years past a constant supply of excellent beef at prices which have been a boon and blessing to the people and which would have been impossible had the American supply been excluded.

Belgium has a dense population of working people, and her food

import is necessarily large and constant. The Belgian Government has seen how safely and economically the people of Great Britain have enjoyed American beef, and after some hesitation and discussion has annulled its restrictions against the import of American cattle, with the result that Germany, fearing that such meats may now enter this country by way of the Belgian frontier, interposes the present decree shutting off all imports of fresh beef from that country. The new restriction will therefore make no change in the amount of cattle and fresh beef exported to Europe from the United States. It is aimed at a traffic which does not exist, since there has been hitherto practically no export of fresh beef from Belgium to Germany (only 406 double centners in 1897, and none in 1898).

But where the recent decree will do American interests most injury is in Denmark, which country is ready to follow Belgium's lead in admitting American cattle, but hesitates to do so for fear Germany will, in such event, promptly shut out fresh-meat imports from Denmark, and thereby destroy a trade which is of real importance to Scandinavia, the German imports of fresh beef and veal from Denmark and Sweden having reached a total of 8,865,100 kilograms (19,556,411 pounds) during 1898. The German decree has therefore the direct effect of excluding American cattle from Denmark, which country, there is good reason to believe, would otherwise admit them as readily as England has done for years and Belgium has now consented to do.

Meats of all kinds are costly in Germany because the home supply is wholly inadequate to meet the demand; and, notwithstanding all the existing restrictions and the efforts of the agrarian press and butchers' associations to resist imports of meats and lard, especially those of American origin, the trade continues to be enormous and is steadily increasing. It is noted that the customs duties from this source during the past six months showed an increase of 4,169,773 marks ($992,415), which represents an augmentation of about 24,500,000 kilograms (54,012,700 pounds) in the amount imported. This increase includes mainly canned meats and sausages, which leads the Deutsche Wacht, at Dresden, to anxiously remark that such an unrestricted influx of prepared meats will work ruin to German agriculture and the slaughtering industry.

FRANK H. MASON,
Consul-General.

BERLIN, *July 20, 1899.*

IMPORTATION OF MEAT INTO FRANCE.*

Refrigerated beef coming from America is admitted into France in accordance with the official decree of May 26, 1888, concerning fresh meats imported from abroad. Such meat must be imported through the customs office specially designated for that purpose and must undergo a sanitary inspection at the port of entry. The tariff for this inspection is 1 franc (19.3 cents) per 100 kilograms (220.46 pounds), and for no fraction of that weight.

In accordance with this decree, the meat should be presented as complete animals, either entire or cut in halves or quarters, according to the usual custom of the butchers. The different pieces must correspond exactly, with the lungs naturally attached, and the adhering intestines of the chest and stomach should bear no trace of "scraping or scratchings."

Fresh pork is not allowed to enter France. In accordance with a decree of December 4, 1891, salted pork alone can be imported under certain conditions, the most important being that the pork must be thoroughly salted.

The decree in full, which appeared in the Journal Officiel of December 5, 1891, is as follows:

The President of the French Republic, upon the report of the Minister of Agriculture,

Considering the decrees of the 18th of February, 1881, and of December 28, 1883, in virtue whereby the importation into France of salt pork originating from the United States of America was forbidden;

Considering the measures taken by the Government of the United States to insure within its territory the sanitary inspection of meats intended for exportation;

Considering the advice of the Ministers of Foreign Affairs, Treasury, of the Interior, of Commerce and Industry,

Decrees:

ARTICLE 1. Salted pork coming from the United States of America can be imported into France at the points on the frontier which will be determined by decree.

ART. 2. Before the unloading of the goods, the importers must produce for each consignment a certificate delivered by the inspector of the Department of Agriculture, appointed by the Government of the United States to watch the establishments in which the animals have been slaughtered and the meat has been dressed, stating that the said meat is of animals in a perfect state of health, and is fit for consumption.

The cases containing this meat must bear the stamp of the official inspector who has undertaken the sanitary examination of the meat.

The entry upon the territory of the Republic will be refused to all consignments which have not complied with the conditions indicated above.

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*This report is in answer to inquiries by a New York trade journal, which has received advance copy.

ART. 3. After unloading, the meat is submitted to the sanitary inspectors designated by the Minister of Agriculture, charged to assure themselves of its wholesomeness and that it is thoroughly salted.

All meat recognized as unfit for consumption will be destroyed in the presence of these sanitary inspectors.

ART. 4. The custom-house officials will grant free entry into the territory of the Republic only to the meats mentioned in article 1, on the presentation of the inspector's certificate provided for in article 3, stating that the meats have been recognized to be healthy and fit for public consumption.

ART. 5. The expense of the service of inspection prescribed by article 3 will be paid by the importers, according to a tax fixed by decree rendered on the proposition of the Minister of Agriculture according to the advice of the consulting committee on epizooty. This tax will be paid at the office of the collector of customs.

ART. 6. Are and will remain canceled the decrees of February 18, 1881, and of December 28, 1883, as well as all dispositions which are contrary to the present decree.

ART. 7. The Minister of Agriculture, the Minister of the Interior, the Minister of Commerce, of Industries and the Colonies, and the Minister of the Treasury, are charged, each, as to that which concerns him, with the execution of the present decree, which will come into effect on the 1st of January, 1892.

Done at Paris the 4th of December, 1891.

As to preserved meat (so called), up to the present time its importation has not been subjected to any sanitary regulations on the part of the French authorities. Its introduction is subject to the payment of the duties provided for in article 19 of the customs tariff, as follows:

Preserved meat in cans, 20 francs ($3.86) per 100 kilograms (220.46 pounds), if direct to France from the United States, or 23.60 francs ($4.54) if through another European port or depot. This includes the weight of the tins or pots and the exterior packing.

JOHN K. GOWDY,
Consul-General.

PARIS, *June 30, 1899.*

UNITED STATES FRUIT AND FRUIT WASTE IN GERMANY.

Consul Pettit, of Düsseldorf, under date of July 15, 1899, sends the following:

The annual report of the Chamber of Commerce of the city of Düsseldorf for 1898–99, just issued, contains a very interesting discussion of the questions involved in the edict of the Imperial Government of Germany restricting the importation of American fruit and fruit waste. The report deals with the question under the heading "Prohibition of the importation of American fruit waste," as follows:

The chamber of commerce was requested by the Royal Government of Prussia to give its opinion as to whether the interests of the German jelly manufacturers

are properly represented by the horticultural division of the Agricultural Society of Rhenish Prussia and the Association of German Jelly Manufacturers, and also with respect to the aims of both of these organizations, since they had petitioned for the issuance of an order prohibiting the importation of American fruit waste. We have replied that the division of the Agricultural Society of Rhenish Prussia should not be regarded as the proper representatives of the German jelly manufacturers, but as the representatives of the German fruit growers, and that they therefore had an interest in preventing the importation of American fruit waste to the utmost of their ability. Nor can the Association of German Jelly Manufacturers be regarded as the proper representative of their branch of industry, as several important manufacturers—among them Rath & Co., the largest concern in the business—are not members of that combine and do not approve the position taken by said association.

The petition of the Agricultural Society of Rhenish Prussia must therefore be regarded only in so far as it aims to protect the interests of the Rhenish fruit growers, who, however, are not prepared to meet the entire demand by their own products. This is illustrated by the fact that the two factories in this city, even if they abstain from using dried American fruit, are consuming from 3,000 to 5,000 centners (330,000 to 550,000 pounds avoirdupois) of German fruit and 19,000 to 21,000 centners (2,090,000 to 2,310,000 pounds) of fruit from Holland. While we by no means deny the danger of bringing in the San José scale, we believe that this peril is being greatly exaggerated by the fruit growers. The American drying methods, exposing the fruit to a heat reaching 100° Celsius, guarantees a thorough destruction of the pernicious insect. This is confirmed by the fact that in the examinations ordered to be made at the boundary for the San José scale, none have as yet been found. We will not omit to mention that these examinations, as well as the police order of the Rhine province of May 16 last, compelling jelly manufacturers using American fruit and fruit waste to burn all packing materials of these goods, have already overrated the use of American fruit waste.

A total prohibition of the importation would greatly harm our domestic commerce and would merely transfer the manufacture of jelly from American fruit waste to foreign countries, and the demand would no doubt be supplied with the foreign-finished product, instead of from the raw material purchased outside. This would have as a consequence another drawback which would affect our agriculturists, for there would soon be a reduction in the sale of their potatoes, employed for the manufacture of glucose, extensively used in making several brands of jelly. A prohibitive order would therefore mean a restriction of the nation's labor, and we would beg that the proposal submitted by the Agricultural Society of Rhenish Prussia be rejected.

The importance of this report will be better understood when it is stated that the manufacture of jelly from American fruit waste in Germany is confined exclusively to Rhenish Prussia.

Mr. Pettit adds, on July 20:

In the report of the chamber of commerce on the fruit market for the year 1898–99, further comments of interest to United States exporters are made. The report says:

Prunes.—After a long interval there was a heavy crop in France (about 400,000 double centners*), which gave cheap prices and active trade in French prunes. California sent only small lots of big fruit, the prices being too high on account of the small crop. Servia and Bosnia had gigantic crops, which made prices very low and the demand for the goods very heavy. Business was satisfactory.

* 88,184,000 pounds.

Apricots and pears.—A failure of crops in California necessitated high prices. The consumption of the goods was much reduced, and the trade small and much hampered by the measures against the San José scale. On a few lots of fancy and choice crop pears there were found some scales, and the eminent authorities could not tell whether the insects were alive or dead. The importations were forbidden, and the goods had to be returned under great expense, whereby the German dealers sustained heavy losses. Some of the foremost American firms guarantee now that no live scales are contained in their fruit. If our authorities exclude from importation lots on which no living but only dead scales can be found, one asks why it is that the importer has to bear all of these losses. It is absolutely necessary to change existing regulations, so that only those lots on which live scales are found will be refused.

American evaporated apples.—This year America had only a small crop, and prices, which opened at 33 marks ($7.85) in the summer, went up to 43 and 45 marks ($10.23 and $10.71) per 50 kilograms (110 pounds) c. i. f. Rotterdam in autumn, and remained at those figures during the winter.

American sun-dried apples.—There was a total failure of crops, and it was difficult to secure the most trifling lots to meet the most urgent demands. Prices were therefore high and the goods not widely consumed.

GERMAN VIEW OF AMERICAN AGRICULTURAL EXPORTS.

I translate below extracts from a recent book written by the Roumanian consul-general in Germany, Mr. Carl Simon. This gentleman ranks high as an economist, and his book has created a deep impression among thinking men of all classes and political parties.

It is noteworthy that these views, favoring the Agrarian party, emanate from a highly respected member of the commercial community. The book bears the title The Export of Products of Agriculture and Agricultural Industries from the United States of America; Agriculture in Germany. The author says, in part:

> It would be of great economic advantage to Germany if our agricultural class could increase its cultivation of grain and other products, such as fruit, meat, etc., in order that we might become independent of other nations and save the many millions that now go abroad. Agricultural products from the United States compete severely with those of native growth. The competition of the United States does not, like that of other grain-exporting countries, confine itself to cereals alone, but is a dangerous rival in all fields, as the country exports all kinds of agricultural machines, etc.
>
> The competition of other countries is, further, not as hurtful as that of the great Republic, because their methods of production and commercial handling of the products are primitive, and our agriculturists can more easily compete with them. The methods of the Americans, on the other hand, are perfect.

The author says that as the American agricultural classes are able to sell their produce in Germany at cheaper rates than are asked for the domestic article, the tariff on imports must be made high

enough to protect German producers. The rate, he says, can be ascertained only by thoroughly studying the respective conditions existing in the two countries. Mr. Simon continues:

It were a national disaster if Germany's agricultural conditions were to conform to those now existing in England. Americans have practiced the doctrines of the great French statesman Colbert, which made France rich and caused her agriculture, industry, and commerce to attain an unexampled stage of prosperity. This system suits the United States, but Germany does not occupy a like position, as she can not raise sufficient food products for her population. This condition might be ameliorated by a thorough reform of the agricultural system. Germany's import of food articles for the year 1897 amounted to over $250,000,000. This figure is alarming and should induce her statesmen to adopt every measure calculated to foster home production, so as to change the adverse trade balances which for the past years have existed in German commerce with foreign nations. In this respect, the Americans ought to be looked upon as teachers of national economy.

SIMON W. HANAUER,
Vice-Consul-General.

FRANKFORT, *July 14, 1899.*

UNITED STATES EXPORTS TO GERMANY.

Those who read the German press can not entertain the slightest doubt that German industrial circles look upon the enormous development of the industries of the United States, during the last few years, with apprehension.

Several meetings of representatives of industrial branches have taken place in Germany within the last few days, and the main point of their discussions was, in every instance, the ever-growing exports of the United States.

The meeting of German manufacturers of tool-making machines which was held at Düsseldorf last week asks for protection against the increasing American importation; so does the convention of German shoe manufacturers which took place at Breslau a few days ago. The association of German cycle manufacturers means to fight American competition even more keenly than the representatives of the branches just named. The agrarians, as is well known, would like to exclude American grain, meat, and fruit.

I am of the opinion that our exports to Germany will continue to increase, if we take the trouble to study the wants of these people; and, above all, if we maintain the quality of our goods.

Whoever enters a shoe store in Germany where American goods are to be had knows that he there gets the best, the most comfortable, and the most elegant shoes that are to be obtained; and, knowing this, he willingly pays a higher price than for the German article. To keep this reputation is of the highest importance to American exporters. One of the leading retail merchants of this city, who has branches in several towns of Bavaria, and who handles American

articles, called my attention to some American shoes for ladies which retail at $1.25. "If you want to kill your export trade to Germany, you must continue to sell such goods," he said. Quantities of cheap and unreliable American shoes thrown upon the German market would do endless harm to our exports in this article.

The same is true of machinery and tools, in which branches of manufacture our country stands unrivaled at the present day, and it applies with still more force to cycles. So far as I could ascertain, out of 2,100 cycles now in use at Bamberg, a quiet place of 40,000 inhabitants, about 60 are of American origin; but they represent the best that is made in our country, and the two local dealers who keep American machines tell me that the demand for them is very good, although the prices are higher than for the best native article. As in the boot and shoe trade, this reputation can be lost to us only by the exportation of cycles of inferior make. My attention was called the other day to an advertisement in the Frankfurter Zeitung, which read as follows: "One hundred American cycles to be sold at any price." Soon afterwards, a local dealer in German bicycles put in an advertisement in which his machines were represented as "good, cheap, and reliable," compared with the "poor American make." The result of my inquiries was that there were no American bicycles of inferior quality to be had, and that one had never been sold at this place. This insignificant incident shows how anxious people are to lower the reputation of the excellent American wheels. It lies entirely in the hands of our export firms to make such efforts unsuccessful, by withholding inferior goods from the German market.

The way to introduce articles into Germany has often been pointed out to the interested parties, viz, send experienced representatives, familiar with the customs and language of this country, establish sample stores, and prepare catalogues giving necessary details in German. The latter point can not be repeated often enough, for the numerous pamphlets and catalogues in English received at the consulates day by day are of no use whatever for German business. Upon my endeavoring the other day to demonstrate the advantages of American tool-making machines to a local firm (Buxbaum Brothers)—one of the most important in this part of Bavaria—by means of a catalogue printed in English, I was told that the firm had no time for translations. At the same time, the manager showed me the catalogue of an American manufacturer of agricultural machinery, beautifully prepared, translated into German, brief and to the point; the machines (reapers and mowers) of the firm are to be found in this part of the country by the score. He said: "Our agents always carry these catalogues with them, and they can be found among the best classes of the peasantry."

At the present time, when the German machine industry is so busy that people have, in many cases, to wait twelve months for machines that have been ordered, our manufacturers should gain a firm footing on the German market. It can be done by sending the proper men over, by conforming to the German usage of giving credit, and by carrying out orders promptly and well.

LOUIS STERN,
Commercial Agent.

BAMBERG, *June 26, 1899.*

GERMANY IN 1898.

Germany's industrial development in 1898 compared favorably with that of any year in the last thirty years. If some falling off is to be recorded in a few textile lines, great gains are noticeable in other directions, notably in machinery. The value of the imports rose from $1,159,060,000 in 1897 to $1,296,148,000 in 1898; that of the exports, from $901,547,000 to $962,380,000.

The real significance of these figures is found in the fact that a large part of the imports consists of raw materials, which are made into all kinds of manufactured articles for export as well as for home consumption. The import of raw materials for textiles went up, while the imports of coal and iron fell off. Both facts furnish proof that home industries have been very active, and that the German coal and iron miners can supply almost all that is needed in these two lines. Of the $53,212,000 increase in exports, drugs, iron, instruments and machines, silk and silk goods, stone coal, and agricultural products, particularly rye, were well represented. Exports of sugar and wool fell off.

Prussia's income tax covered $32,368,000 in 1898, against $30,900,000 in 1897, $28,560,000 in 1896, $27,618,000 in 1895, $27,000,000 in 1894, and $26,894,000 in 1893. The increase in the power to pay taxes was greater in 1898 than in any year since the tax reform was introduced.

A still better proof that the entire population has participated in the prosperity recorded is found in the increase in wages throughout the Empire, and the savings banks' reports. Prussia's savings banks show deposits of $1,182,384,000 in 1898, against $1,107,414,000 in 1897; a gain of $74,970,000. This increase of deposits, most of which were made by working people rather than by merchants and manufacturers, indicates, as nothing else would, the progress of the Empire.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 23, 1899.*

No. 229——2.

EFFORTS TO INCREASE GERMAN EXPORTS.

Vice-Consul-General Hanauer, of Frankfort, under date of June 9, 1899, sends translation of an extract from the Berlin Confectionair, one of the principal organs of the German manufacturing and export trade, especially in such lines as textile goods, ready-made clothing, etc. The German people, adds Mr. Hanauer, are fully alive to the importance of not only maintaining their present position as purveyors to the world's market, but believe it essential to their standing as a great power to make still greater efforts to compete with England, which heretofore had the lead, and with new and energetic rivals, such as Belgium, Japan, and, last but most feared, the United States. The extract reads, in part:

WHAT DOES GERMANY DO FOR HER EXPORT TRADE?

Of late from various sides demands have arisen for the establishment of a central bureau, on the order of a commercial museum, like that in Philadelphia, in order to further Germany's export trade. In view of the mighty efforts which other nations are making to push Germany from the position which she has won in the world's markets, it seems necessary for our Government to use all methods which other nations employ in competing with us. It is a stale truth that hitherto the Imperial Government has done very little in this line.

It is a gratifying change, auguring better results for the needs of our commerce, that considerations are pending to improve our consular system; and the fact that the modest item of 55,000 marks ($13,000) appears in this year's budget of the Foreign Office, to be expended in sending commercial experts abroad, is further evidence that this Government is beginning to use those methods which have in the past been so successfully employed by England, France, and the United States in fostering their foreign trade.

We have a numerous staff of consuls, who promptly and regularly send in their reports, but no one can maintain that these meet the wants of trade. It is a fact long since admitted that the immense mass of information stored up in the monthly publications Handels-Archiv has no direct or practical value to our merchants. How inferior our consular system is to that of other countries is evidenced by the fact that Germany has only five professional consuls in the United States, whereas the latter country is represented by eleven salaried consuls in the Rhenish province of Prussia alone. The institution of chambers of commerce outside of our own country is new to us. Austria, England, France, the United States, Holland, Spain, Italy, and Belgium have these in foreign lands, and even Greece and Turkey are about to establish them.

It is true that our export trade is at present in such good shape that the resort to extraordinary means for its improvement might seem prompted by excessive anxiety; yet we must bear in mind that the growth of our foreign trade does not keep step with the increase of our domestic production.

It has become generally known that while bloody contests between nations are of less frequent occurrence than of yore, struggles in economic fields are gaining in acrimony, internal trade is becoming more complicated, and the constantly growing competition makes it necessary for us to leave no means untried whereby we may not only maintain our present prominent position in the world's trade, but secure it in the future.

GERMAN CHAMBERS OF COMMERCE.

Vice-Consul-General Hanauer transmits from Frankfort, under dates of July 19, 21, and 28, 1899, extracts translated from recent reports of German chambers of commerce. The annual reports of the chambers of commerce, Mr. Hanauer says, are received by the manufacturing and financial classes in Germany with great interest, and have the importance of the findings of an expert commission. In Europe generally, and more especially in Germany, chambers of commerce exercise great influence in political and mercantile affairs. They are efficiently constituted, have a large staff of able and well-trained officials, and are frequently called upon by the government to inquire into matters appertaining to internal improvements or bearing on the foreign policy of the nation.

The following extracts are from the report for 1898 of the Chamber of Commerce at Frankfort:

The year 1898 has been even more favorable to German trade and industry than the prosperous years preceding it. This is to be attributed to the pacific state of Europe, to our favorable commercial relations with those European countries with which we have trade treaties, to the increasing volume of our exports—particularly to transoceanic countries—to good crops, to that spirit of enterprise which has developed almost to an extreme degree, and to the confidence in German industrial undertakings. The boom may be considered general, although a few solitary lines of trade do not participate therein. The more important branches of industry, such as work in iron and coal, the building trades, machine works, and chemical factories, have achieved most satisfactory results. The larger consumption, not only of necessaries of life, but also of articles of luxury, denotes the general improvement of economic conditions. Special conditions retarded development in some branches of industry. The textile industry, especially cotton spinning, suffered from overproduction. The trade in cereals was affected by the mad grain speculations in the United States. Indigo trade was handicapped by the growing competition of the artificially made article, the tobacco trade by the war in Cuba; the sale of clothing declined in consequence of the unseasonable weather last summer.

Taken as a whole, the business of the year has been satisfactory, though complaints of small profits, owing to increasing competition, are heard in many reports; the export trade especially has a hard fight to maintain its position in foreign countries. But the recent efforts of the Imperial Government to obtain new footholds in transoceanic lands promise that the success of our export trade will continue. This, however, depends upon a strict adherence to our policy of amicable trade relations, based upon commercial treaties.

It is easy to understand that the progress of our exports has caused envy among foreign nations, which has induced them to establish national trade barriers against Germany's competition. The newly established central bureau for the preparation of trade treaties reports to the Government all cases where German commercial and industrial interests appear to be threatened. This activity is very opportune, and we consider it to be the duty of all economic bodies to support this and like institutions whose object it is to promote a reciprocal trade policy.

For years past, the United States of America has been one of our most important trading fields. The cultivation of this field has become the greatest of our economic anxieties, and the most thorough and liberal examination should be given the matter ere we apply tariff measures to this country or treat it in a politico-economic way.

To-day, the United States looms up as the greatest producer of breadstuffs, and with all the factors of gigantic development in metal production. It has already attained such a position in all branches of industrial power as to enable it to boldly take up the gauntlet of competition in the international arena. Germany has no special treaty with the United States; the most-favored-nation clause is the basis of the mutual trade, but this presupposes that both nations maintain toward each other such tariffs as not to make the exchange of goods prohibitory. The Dingley tariff has affected German exports inimically. Germany's imports from the United States in 1898 exceeded those of the previous year in twenty-five leading lines, whereas she exported to the United States considerably less in twenty important lines than in 1897. The question arises, Is the most-favored-nation clause without a tariff reduction on the part of the United States of any value to us?

The report, adds Mr. Hanauer, notices the increasing imports from the United States of building timber and woods for manufacture of furniture, saying that pitch pine, Carolina pine, cottonwood, and other woods are much in demand and have a regular market in Germany. Complaint is made about the unsatisfactory state of the German bicycle manufacture, which is said to have suffered severely from the competition of American makes of a cheap sort.

The report of the Dresden Chamber of Commerce says, in part:

Though Great Britain occupies first place in German import statistics, these imports, mainly consisting of raw and finished materials, attract little notice. But the competition of the United States, especially in finished industrial products, stands out in bold relief.

The American enterprises, working with immense capital in every branch of trade and assisted by a corps of consular officials of genuine American cleverness, operate with extraordinary activity in all markets, including Germany. Owing to these advantages, and in consequence of the advance in specializing and subdividing the manufacture of articles, the United States is enabled to sell at lower prices, though paying higher wages than its European rivals.

With the exception of a few lines, our trade with the United States in 1898 was unfavorable. The Spanish-American war acted as an extinguisher to the export of many German industrial products; the tariff handicapped others. The opinion is prevalent in various quarters that if the present tariff continues, we must familiarize ourselves with the thought that our export to the United States will some day cease altogether, and that if we want to do business with that country we must establish branch factories there.

Reports from other German chambers of commerce, continues Mr. Hanauer, urge the necessity of a trade policy having for its aim the continuation of existing commercial treaties with foreign countries and the avoidance of a tariff war. The manufacturing, commercial, and banking interests in Germany are politically stronger than the Agrarian party, which favors repressive measures against American products entering Germany.

The Chamber of Commerce of Hagen, speaking for the iron and steel manufacturing district in Rhenish Prussia, says:

> The wire-manufacturing branch has shown no improvement during 1898, nor can such be looked for in the near future. The combination of the factories in 1897 led to a considerable improvement in the price of the goods sold in our country. The wire-tack trust, which was organized last fall, has begun its activity by advancing the prices for domestic consumption. The orders from abroad are carried out at sacrificial prices, but the sacrifice is borne by the combine instead of by individual competitors, as was the case formerly. The syndicates in coal, pig iron, and half-finished goods allow a bounty on all kinds of wire and wire tacks exported, which helps the manufacturers to compete in the international markets.
>
> The strained conditions that now exist in this branch are due to the competition of the United States. The iron trade there has developed in a stupefying manner, making the country a productive power of the first class. The condition of this trade in Germany has, during the last year, grown more and more unfavorable, because the Americans have steadily taken possession of the markets in Japan, China, and Australia, which heretofore had been supplied mainly by German products. The prices abroad have at the close of the year declined so low that even German works that produce rolled wire have to give up taking contracts, on account of the cost of the raw material. Nor is the outlook for the lately established wire-tack trust at all auspicious, as it must submit to heavy sacrifices in order to snatch at least a few orders from the claws of American competition.

The Chamber of Commerce of Solingen (Rhenish Prussia district), the center of the manufacture of cutlery, bewails the fact that this industry can not thrive because, owing to the closing of the American market, the competition at home has become so intense as to undermine prices, diminish profits, and produce a decline in the quality of the goods made. The manufacture of scythes, it is noted, was sufficiently active; but in the future this branch is threatened by the increasing import of American grass mowers. The commercial treaty with Russia has had good results, and business with that country has steadily increased.

Germany's exports of cartridges and percussion caps have greatly increased in 1898, as the shipping statistics of Hamburg (the main outlet for these articles) show. The exports during 1898 amounted to 16,125,000 marks ($3,857,000), against 10,125,000 marks ($2,409,000) for the year previous. The largest customer was Chile, which took to the value of 9,000,000 marks ($2,142,000). Turkey took 2,000,000 marks ($476,000); Spain nearly as much. Argentina, China, and Mexico also bought largely.

GERMAN ZINC EXPORTS TO THE UNITED STATES.

I transmit herewith a circular on the zinc industry in the United States,* which has been distributed all over Germany and sent to every representative in the Reichstag. It states, among other things, that, on account of the tariff of 1½ cents per pound on zinc dust, it is now impossible to export it to the United States.

Upon an examination of the books of this consulate, I find the exports of zinc dust to the United States during the last seven fiscal years to have been as follows:

1892–93	$10,533.53
1893–94	9,808.43
1894–95	37,454.40
1895–96	19,465.37
1896–97	39,024.27
1897–98	19,766.67
1898–99	41,779.39

This table shows that the export for the past fiscal year is the largest on record, not even excepting the year ended June 30, 1897, when the German manufacturers, expecting an increase in the American tariff laws, were flooding the American market with wares of all descriptions.

I immediately called at two of the leading newspaper offices here with the circular and the tabular statement of this consulate, and explained to the commercial editors that the circular was misleading on this point. Each of the editors has published a full correction of the article.

C. W. ERDMAN,
Consul.

BRESLAU, *June 30, 1899.*

COMMERCIAL POLICY OF HUNGARY.

I wish to call attention to the compact lately agreed upon between the Austrian and Hungarian prime ministers and expected to pass the Hungarian Parliament in a few days, according to which Hungary's (or Austria's) will alone is sufficient to give notice of termination of any commercial treaty now binding on the Monarchy, among which is included the treaty of 1829 with the United States. The United States recognized the duality of Austria-Hungary in its trade-mark treaty of 1871. This duality, at least in commercial

* Filed for reference in the Bureau of Foreign Commerce.

administration, is becoming pronounced under the new compact. One feature can not be overlooked—the consular service is now arranged by a "convention" between the two ministries, not by an article in the compact legislated by the parliaments, as hitherto.

The administration of commercial affairs in Austria-Hungary has been theoretically separate, though joint in action, since 1867, when the two ministries of commerce were founded. On the 10th of April last I received, in common with other consular officers accredited here, a circular note from the Minister of Foreign Affairs in Vienna announcing the publication of Hungarian commercial statistics in the French language, in a review entitled La Hongrie Économique, about to appear. This appears to indicate that the imperial and royal common Government attaches no small importance to the administration of commerce in Hungary.

By the new compact, unless the Austrian situation (race feud) should change, Hungary is assured the right to cause all commercial relations with foreign countries to conform to a new protective tariff at the end of the year 1903—that is to say, the foreign treaties will all be terminated at that time, and the new tariff, suiting Hungary's agrarian wishes, will be introduced by a special law. The joint administration of commercial affairs will continue, however, until 1907; and by January 1, 1908, Hungary will be able to say whether she cares to continue her union with Austria in commercial and other economic affairs. Hungary would thus attain the position constitutionally held by Egypt and Bulgaria, particularly by the latter, and, like her, make her own commercial treaties independently of the common Government.

The two men who act as referees in the commercial deliberations of the Hungarian Parliament and its "delegation" are Messrs. Julius Rosenberg and Max Falk, respectively, neither of whom is a Hungarian by race.

FRANK DYER CHESTER,
Consul.

BUDAPEST, *June 28, 1899.*

SILK TRADE IN LYONS.

The Chamber of Commerce of Lyons has just published its annual report of the silk production of this city for the year 1898. The total product of pure silk stuffs was, in round numbers, $30,700,000, or $1,200,000 in excess of 1897. These figures are inferior to those of 1895 and 1896; but they are considered encouraging as marking a resumption of activity. There has been an increase this year in the manufacture of faille, of taffetas, of velvets, of moires, of stuffs for umbrellas, parasols, and muslins. On the other hand,

the production of black armures, of all kind of pongees, of surahs, and similar goods has been less than in 1897. There has been an excess in the manufacture of foulards, stuffs of pure silk, marcelines, and goods used for the furniture of churches. A decline is observable in the production of linings, serges, lustrine armures, and striped satin pekins. The production of mixed goods in 1898 rose to $24,000,000, an increase of $1,100,000 over 1895 and a decrease of about the same figure as compared to 1897. A large number of looms were occupied during the year 1898 in making plush for hats and modes, liberty satin, turquoises, cotton-back armures for modes and linings, mixed stuffs for collars and cravats, carriage trimmings, and figured and bordered velvets for the Orient and the Indies. Demands from the two latter quarters have been steadily increasing for the last three years, especially for the two species of goods named. Stuffs worked in gold and silver have also found a largely increased demand in the Orient and the East Indies. The output in this line aggregated about $1,000,000 during the year 1898, the largest of any year. The manufacture of crepes is reported as assuming largely increased proportions, the production for 1898 being nearly double that of 1895. Crepes de chine augmented during the same period from $200,000 to $400,000; the production of muslins increased sixfold; that of grenadines nearly doubled; gilded stuffs used for military uniforms rose from $160,000 to $200,000; and silk, cotton, and woolen passementeries from $200,000 to $300,000.

While Lyons continues to stand at the head of other cities in the production of all fine silks, satins, velvets, and kindred goods, Milan seems to have definitely wrested from her the trade in "thrown" silk. In 1878, the sales of thrown silk—that is to say, of silk yarn—in Milan amounted to 2,475,280 kilograms (5,457,000 pounds), against 4,244,141 kilograms (9,356,600 pounds) in Lyons. In 1888, the sales of Milan had risen to 4,538,305 kilograms (10,005,100 pounds), while Lyons had advanced to only 5,183,520 kilograms (11,427,500 pounds). Milan continued steadily diminishing the gap until 1898, when she took her place in the lead with a business of 7,549,395 kilograms (16,643,400 pounds), against 6,462,639 kilograms (14,247,500 pounds) for Lyons.

Several reasons may be cited for this change of business in the interest of Milan. The Lyons dealers attribute it to the new means of transportation and to the French duty on raw silk. Some years ago, before the balance of this trade began to turn to the side of Milan, the great bulk of the transportation from the Orient was in English and French ships, which made Marseilles the principal stopping place in the Mediterranean. The German line, which now does a great deal of the business between the Peninsula and the Orient,

made Genoa its principal stopping point in the Mediterranean; and as a consequence, the raw silk brought from the Orient goes into Italy and on to Milan, where it is thrown, and by means of the St. Gothard Tunnel forwarded to Switzerland, Germany, and Russia. It is estimated that about 11,000 bales of raw silk are annually landed at Genoa which were formerly put down at Marseilles.

JOHN C. COVERT,
LYONS, *June 21, 1899.* *Consul.*

FRENCH MARKET FOR AMERICAN IRON.

Consul Brittain writes from Nantes, July 10, 1899:

There have recently been many inquiries for the names of the leading firms in the United States that manufacture various kinds of machinery. A number of sales of American machinery have been made during the past year. Heretofore, considerable machinery used by the shipbuilders of Nantes has been purchased in England. English manufacturers have two advantages over those of the United States—first, their nearness to this market; second, the advantages accruing from the minimum tariff rate. For machine tools weighing over 1,000 kilograms (2,204 pounds), the maximum duty is 15 francs ($2.89), the minimum 10 francs ($1.93), per 100 kilograms (220.46 pounds); weighing from 250 to 1,000 kilograms (550 to 2,204 pounds), maximum 20 francs ($3.86), minimum 16 francs ($3.08); small tools, weighing less than 250 kilograms, maximum 70 francs ($13.50) and the minimum 50 francs ($9.65) per 100 kilograms. The difference on structural iron or that used for shipbuilding is not so great, the maximum being 6 francs ($1.15) and the minimum 5 francs (96 cents). The recent augmentation in prices and the scarcity of a visible supply of structural iron in this part of France makes this an opportune time for the American manufacturer to invade this market. The nearness of the English manufacturer has given him an easy victory in the past, but the shipbuilders of the Loire have come to the conclusion that if the American iron manufacturers can sell iron in England and in English colonies, it is at least worth while to get our prices.

I believe if the American manufacturer were on the ground with prices and terms he could capture some orders. There are three shipyards at Nantes, where there were constructed last year forty-two iron vessels, varying in tonnage from 3,000 downward. At St. Nazaire, 30 miles west of Nantes, there are extensive shipyards, where some of the largest vessels in the service of the Compagnie

Générale Transatlantique were built. About two weeks since, a large war vessel for the Government of Japan was launched at St. Nazaire. American manufacturers of structural iron would do well to correspond with Julun Lanoé, of Nantes, an extensive dealer, who is anxious to obtain American prices on bar, structural, and plate steel and iron.

COMPETITION WITH AMERICAN COPPER.

Consul Marshal Halstead sends the following from Birmingham, July 13, 1899:

Many people believe that to those engaged in wheat-cornering operations in the United States we owe the competitive opening up of vast areas of wheat land in Russia, India, South America, and Egypt. Judging from the following article from Engineering, the present corner in copper, which has caused prices to go nearly sky high, may result in injury to the copper-mining interests in the United States parallel to the loss caused America by the corners in wheat.

Engineering, under the caption "When will the copper corner collapse?" says:

Everything depends upon the ability of the combine to hold accumulated stocks. There is a lot of money at the back of the movement, and it has become useless to speculate upon the length of time that will elapse before those concerned find it expedient to unload. It was generally thought that they would not have held on so long as they have. But the almost universal opinion of the trade now is that this continuous buying at absurdly inflated prices can not be profitable, seeing that when the smash does come it will come rapidly and will mean that copper accumulated at £76 or so a ton will be thrown onto a demoralized market and sold at £10 to £20 per ton lower. One good effect of this boom has been to attract more attention to copper mining in various parts of the world outside the United States. In our colonies the gold fever takes almost everyone concerned with mining, and it is only in times like the present that men turn from a pursuit which promises a few plums to the lucky to another line of activity, which, if it has fewer plums, offers the assurance of a good profit on a well and long sustained basis. As a result, we find in our colonies an enormous number of copper mines now being reopened and much virgin soil developed. Mining men in Australia hope, as a matter of course, that £76 copper will continue for a long time to come; but, in the meantime, realizing that it will not, they are producing all they can, in order that they may obtain as much solid advantage as possible. While they realize the certainty of a fall in quotations, they have come to recognize that even on a £50 basis there is a satisfactory return on the metal, provided only that they adopt proper machinery and improve their methods generally. If, they argue, Americans can secure fabulous dividends over a lengthy series of years out of ground that yields from 1 to 3 per cent of metal, surely they can do as well out of ground that averages from 10 up to 30 per cent. It is as a consequence of this somewhat tardy conviction that we have witnessed the revival of copper mining in South Australia, New South Wales, Tasmania, and Queensland.

ALUMINIUM IN GREAT BRITAIN.

Consul McFarland, of Nottingham, under date of July 19, 1899, sends a printed report of a recent meeting of the British Aluminium Company, showing present conditions of manufacture and demand for the finished product in shipbuilding and for other purposes. Extracts from the report are given below:

[From London Times, July 19, 1899.]

The fourth ordinary general meeting of the British Aluminium Company, Limited, was held yesterday. Mr. R. W. Wallace, Q. C., presided, and, in moving the adoption of the report, said that * * * all the company's factories were working satisfactorily. At Larne they had succeeded in reducing largely the cost of the production of alumina, and, as the result of recent experiments, they saw their way to making a still further reduction. At Milton the factory had been extended, and was now working almost night and day; while at Foyers the storage works had answered their expectations. The works at Greenock had also given satisfactory results in regard to the manufacture of carbons. As to the demand for aluminium, it was making steady, if only comparatively slow, progress. During the last six months of 1898 their sales increased by 48½ per cent, as compared with the figures in the corresponding period of the preceding year. So far, the Government had rendered them very little assistance. No doubt, the Government would soon have completed the trials which were now being made, and then they might hope to hear from them. The German army was more or less equipped with aluminium utensils, and German ships of war had internal fittings made almost entirely of the same metal. In reference to the general trade, he had to tell them on a former occasion that the demand was stopped on account of a strike; but now the ground of complaint was that nearly every workshop in the country was fully occupied with other classes of goods. A good deal had been said with regard to the injurious action of sea water on aluminium, but the board knew by long experience that aluminium did not deteriorate in salt water to the extent that had been alleged. The yacht *Defender*, which won the last international race, was built very largely of aluminium, and, after four and a half years, she was found to have deteriorated so little that very few repairs were necessary to put her into a condition to compete with the *Columbia* at the recent trials. Torpedo boats and other ships, moreover, had been built in France partly of aluminium. With regard to the use of aluminium for electrical purposes, that had been going on very fast in America, but it had not made so much headway in this country. According to Lord Kelvin's recent investigations, the electrical conductivity of aluminium was 60 per cent of the conductivity of copper, bulk for bulk. As, however, aluminium was only one-third of the weight of copper, it was apparent that about one-half the quantity of aluminium gave a corresponding amount of electrical conductivity to that given by copper. Therefore, at the present price of copper aluminium was much cheaper to use for that purpose, besides having the great advantage of lighter weight in connection with telegraph poles. * * * Lord Kelvin said that in the fittings of ships aluminium had proved valuable, convenient, and of great practical utility. As to the actual construction of ships with aluminium, that was a matter which would have to be settled by the experience of engineers. He did not believe that the question of the efficiency of protecting aluminium by paint had yet been gone into sufficiently. If they compared an unprotected aluminium plate with steel or iron, he thought that it would be found that the former did not rust away so quickly as the latter.

MANUFACTURE AND USE OF WOOD FLOUR IN GERMANY.*

In compliance with special instructions from the Department, I have to report that wood flour (in German, Holzmehl) is made by grinding sawdust to a fine powder, and is used for two general purposes, viz, the manufacture of explosives, especially dynamite and nitroglycerin, and (2) the manufacture of linoleum and papyrolite, or artificial flooring.

There is no manufacturer of dynamite in Berlin, but from the representative of a firm in Saxony, it has been ascertained that wood flour has been used in the manufacture of dynamite as a cheap substitute for infusorial earth, which is the standard material for that purpose. The entire German supply of infusorial earth comes from one source at Lüneburg, between Hamburg and Hanover, and when that material became scarce and expensive by reason of increased demand, experiments were made with wood flour as a substitute. From the best information that can be obtained, it is regarded distinctly inferior to infusorial earth for making explosives, and is only used when extreme cheapness of product is desirable or the infusorial earth can not be obtained.

Wood flour has also been somewhat extensively used in the manufacture of linoleum, a kind of floor cloth made by laying a coating of hardened linseed oil mixed with ground cork on a canvas net or backing; but here again it was found to be hard, inelastic, and for that reason inferior to cork meal, so that its use has been, so far as can be ascertained, abandoned by most German makers of linoleum. If used at all for this purpose, it is done secretly and would be regarded as an adulteration.

The third and by far the most important use of wood flour in Germany is for the manufacture of papyrolite or xylolite, a kind of artificial flooring, which is extensively produced by several large firms and companies in Germany, notably the Papyrolite Werke, Paul Becker, in Loebtau, near Dresden; by Hermann Jaritz & Co., of Bremen; and by Paul Karnasch, at Frankenstein, Silesia.

Papyrolite is extensively used as flooring for kitchens, halls, corridors, and for public rooms, such as cafés and restaurants. It is a substance between wood and stone, practically fireproof, impervious to water, and, being a nonconductor of heat, is warm in winter. It is also used as flooring on German war vessels, because it has

*This and the following report were made at the request of a Washington press association, to which advance copy has been sent.

most of the advantages of wood, but does not splinter from shot nor take fire.

Whether American wood flour can be successfully introduced as a commercial product into Germany will depend entirely upon its quality and the price at which it can be delivered in this country. Assuming that the American article is of equal quality with that of the domestic supply, the one remaining question is whether wood flour of American origin can undersell the German product, which is made by pulverizing sawdust that has no value except as fuel. German wood flour is therefore abundant at from 4 to 5 marks (95 cents to $1.19) per 100 kilograms (220.46 pounds)—a maximum of $11.90 per metric ton—which is a price so moderate as to apparently offer little encouragement for imports from a source so remote as the United States.

Mr. Paul Karnasch, at Frankenstein, Silesia, one of the above-named manufacturers of xylolite, will, however, be pleased to receive samples and offers of wood flour from American exporters, it being understood that the practical interest of the subject will be governed substantially by the conditions herein above stated.

FRANK H. MASON,
Consul-General.

BERLIN, *June 19, 1899.*

MANUFACTURE AND USE OF WOOD FLOUR IN SCOTLAND.

Replying to circular of date May 5, 1899, requesting information upon the subject of manufacture of wood flour for use in making linoleum and explosives, I have to say that, so far as I can ascertain, Nobel's Explosives Company is about the only user of the flour in this part of Scotland. The secretary of that company states that he would think only about 400 tons per year would be used in connection with explosives in Scotland. While refusing to give the price paid, he said it was higher than that given in the circular, viz, £4 3s. 10d. ($20.36) per ton. That used here is said to come from Montrose, near Dundee.

This information is in connection with the manufacture of explosives only. I am unable to secure any data with reference to linoleum manufacture.

SAMUEL M. TAYLOR,
Consul.

GLASGOW, *July 25, 1899.*

ELECTRIC STREET-CAR SYSTEM OF HAMBURG.

The electric street-car system of Hamburg is claimed to be in every respect the best and most complete on the Continent, exhibiting peculiar features both in its construction and its management.

It is an especially interesting fact that the whole plant is the result of American invention, having been built after the Thomson-Houston system by the Union Electricity Company for the joint-stock company called the "Hamburger Strasseneisenbahn Gesellschaft."

Up to about four years ago, the old horse cars on some lines and small steam cars with trailers on others were the modes of street-car transit in this city, but the perfection of electrical locomotion and appliances caused an entire revolution.

The company was established with a capital stock of 21,000,000 marks ($4,904,000); its rolling material consists of 500 trolley cars and 400 smoking cars, hereafter described. The system is one of aërial electric current, the so-called "trolley-car system." It was with great difficulty that the wires could be strung, as on narrow streets and on those where traffic is extensive the state prohibited the company from setting up the poles. The company therefore had to make arrangements with the different owners of the houses on both sides of the streets, to obtain permission to anchor the cross wires to their walls, to which there could be raised no objection, as it was safe and obviated the presence of poles on the sidewalk. To obtain this permission, the company paid to house owners the amount of the cost price of the poles—47 marks ($11.20) for a one-wire-current anchor and 63 marks ($15) for a two-wire-current anchor. Wherever the poles are set up, they are of very neat appearance, and serve not only as poles for electric street-car wires, but also as electric-light poles.

In some instances, the streets proved to be too narrow to lay a double track, and, in order not to diminish the strength of the current, a double contact wire was strung.

Some ten years ago, before the electric street-car system was planned, the state of Hamburg had granted a monopoly of electrical appliances and currents on the public roads to the Hamburg Electricity Works. When the shareholders of the present electric street-car company resolved to build the road, and also to build their own electrical plant, the Hamburg Electricity Works insisted upon its rights, as the only body entitled to build electrical appliances and currents on the public roads of the city of Hamburg, although at

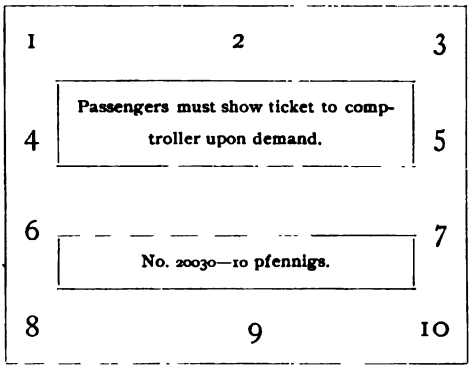
the time the monopoly was granted to the said works nobody ever thought of trolley cars, but simply of "electric lights on public roads." However, the contract reads "electric currents," and not "electric currents for electric lighting." The Hamburg Electricity Works, therefore, was greatly in the way of the newly planned trolley-car system. However, a satisfactory arrangement was made between the street-car company and the electricity works, in that the latter enlarged its plant in order to supply to the street-car company the electricity required to move 500 trolley cars (or large cars) and 400 trailers (or small cars), called "smoking cars." These smoking cars are simply the old horse cars and are coupled to the trolley car by means of a link, or connecting rod; thus, the old equipment is utilized. About every third trolley has one of these trailers, or smoking cars.

The Hamburg Electricity Works pays to the state of Hamburg 20 per cent of its gross income, as a return for the monopoly; the street-car company pays for the electric current 12½ pfennigs (equal to 2.97½ cents) per kilowatt hour (1 kilowatt hour equals 1,000 volt ampères, or 1.36 horsepower). The state of Hamburg refunds to the Electric Street-Car Company 20 per cent of this price, leaving a net cost price for the electric current of 10 pfennigs (2.38 cents) per 1,000 volt ampères.

As a compensation for the use of the public roads, the street-car company pays to the state of Hamburg 1 pfennig (0.238 cent) for each passenger. The average fare for each person carried being 11.5 pfennigs (2.74 cents), the state receives 8.7 per cent of the gross income of the company. In addition to this, the street-car company must keep the paving inside of the tracks, and 30 centimeters (11.8 inches) outside of each track, in proper condition.

The fares on the Hamburg trolley cars are exceedingly low. After long experimenting, the "tariff of distances" was found to be the better plan, and was approved by the senate. It might be mentioned here that the street-car company is not at liberty to fix the price of the fare on its lines, but must forward passengers at the rate fixed by the board of public traffic, to be approved by the senate. All lines are divided into zones of 2,000 meters (1.24 miles), and the fare is as follows: For the first two zones (4,000 meters, or 2.48 miles), 10 pfennigs (2.38 cents); for each two zones or part thereof, thereafter, 5 pfennigs (1.19 cents). Each passenger, upon payment of the fare, receives from the conductor a ticket, which is cut off from a long roll of tickets, each ticket being provided with a number. The tickets have different colors—yellow for the 10 pfennig, or two-zone distance; green for the 15 pfennig, or four-zone distance; blue for the 20 pfennig, or six-zone distance, etc.

The following is a drawing of a ticket, four times enlarged, showing the controlling number and other controlling marks, hereafter described:



The numbers on the sides of the tickets indicate the zones; the conductor must tear out that zone number at which the passengers step on the car. In this way, it is impossible for passengers to commit fraud by buying a two-zone ticket for a four-zone trip, etc., as it can at once be seen where they stepped on the car, and an attempt to deceive can be detected. When the conductor collects the fare, it is his duty to inquire the destination of the passenger, so that he knows exactly whether a 10, a 15, or a 20 pfennig ticket should be given. At the end of each two zones, the conductor fills in a blank form, and states the last number of each grade of ticket sold. If a comptroller steps on the car (and he is liable to step on at any time) he simply counts the number of passengers, which must also be the total number of tickets sold; if there is a discrepancy, it proves that either there is a passenger on the car who has not paid, or that the conductor has collected the money, but neglected to give out a ticket. The passengers are then requested to show their tickets; the passenger having no ticket (whether he says he has paid his fare or not) must pay again, and the conductor is fined 1 mark (24 cents) for the first offense, 3 marks (72 cents) for the second, and discharged at once when the third offense is detected.

The commutation-ticket system is a peculiar feature. The street-car company, acknowledging the fact that hundreds of people are bound to use the cars a dozen or more times a day, has issued "commutation tickets," divided into two sections. The first section entitles the holder of a commutation ticket to the use of one line in both directions, and as many times as he chooses, including Sundays. The second section issues commutation tickets for the use of all lines, in all directions, and allows the holder to avail himself of the accommodations as many times as he chooses. These tickets are valid

from three to twelve months, and the prices are so low that if a person uses the cars over three times a day, a commutation means a saving—in some cases the fare for each trip amounting to less than 1 cent.

Prices for commutation tickets are as follows:

Duration of ticket.	For use on one line.		For use on all lines.	
	Marks.		*Marks.*	
Three months	25.00	$5.95	46.50	$11.07
Four months	32.00	7.62	60.00	14.28
Five months	39.00	9.28	73.00	17.37
Six months	46.00	10.95	86.00	20.47
Seven months	52.00	12.38	98.00	23.32
Eight months	58.00	13.80	109.00	25.94
Nine months	64.00	15.23	120.00	28.56
Ten months	69.50	16.54	130.00	30.94
Eleven months	75.00	17.85	140.00	33.32
Twelve months	80.00	19.04	150.00	35.70

In addition to this, combination tickets may be had for the use of one specified line and part of one other line, and, also in this instance, prices are extremely low. Further, very cheap tickets are issued for children going to school. These tickets are personal, a trip costing about 4 pfennigs (0.95 cent).

The cars stop only at fixed halting places to take on and let off passengers. These halting places are generally at street crossings, marked by a white sign affixed to lantern poles, on which is printed the word "Haltestelle" (halting place).

The trolley cars offer seats for 20 to 28 persons, 10 to 14 on each side. Besides, 4 persons are allowed on the front and 5 persons on the back platform. The full number of passengers being on the car, the conductor lowers a sign, "Besetzt," which means "occupied," and a car can not take more passengers than the above number. The regulations in this respect are very strictly observed. Say, for instance, a lady steps on the car at a halting place, while the conductor is front, collecting fares, the car being already "occupied" when the lady stepped in; but there being no conductor to prevent, she goes inside, and a gentleman offers her his seat, the gentleman then taking a stand on the platform. The conductor returns to his post, when the gentleman is requested to step off the car at the next halting place, having forfeited his seat and the car being fully occupied. Should he refuse to leave the car, he is put off. The policemen on the streets have instructions to watch the cars sharply when passing their posts; and if they detect a car carrying one person more than the fixed number, they note the number of the car, and the company receives word that the said conductor has been fined 3 marks (72 cents), to be deducted from his wages and to be paid to the police board. If a comptroller of the company steps on the car

and detects a surplus of passengers, he notes the number of the conductor, who is fined 3 marks (72 cents), which are paid to a charity fund and divided once a year to employees of the company requiring support.

All cars—not only the trolley cars, but also the smokers—are supplied with hand and electro-magnetic brakes; the latter are applied in case of danger, and afford a sudden halting of the car. There are no fenders in use on the cars, but accidents are few. Experiments are being daily made with all sorts of safety appliances to test their reliability; but up to the present the company has not decided to introduce any particular system on all cars. There is certainly an opportunity here for a good American device, as the different appliances now in use are not fully satisfactory to the company or to the authorities.

The Hamburg Electric Street-Car Company must be considered a model institution, and its system worthy of careful study.

HUGH PITCAIRN,
Consul.

HAMBURG, *July 18, 1899.*

EXPOSITION AT GHENT.

An exposition of the industries and arts of this province was opened in this city on the 1st day of June and is to continue until the 1st of September.

Ghent, with its suburban towns, contains a population of 214,000. The exposition grounds, comprising 41 acres, are situated in a portion of the city park, ten minutes' ride by electric tram from the heart of the city. The floor space for exhibitors (some 2,300 in number) covers a total area of 57,812 square feet.

All foreign displays are made through local agents. They consist almost entirely of machinery, such as weaving, spinning, artificial ice, steam laundry, feed cutters, boilers, engines, steam pumps, coffee grinders, etc., and of carpenters' and machinists' tools. The foreign countries represented are the United States, England, Germany, and France. The following American manufacturers are represented:

The Henderson Manufacturing Company, Geneva, N. Y.
Enterprise Manufacturing Company, Philadelphia, Pa.
William P. Kellogg, Troy, N. Y.
The Dean Steam Pump Company, Holyoke, Mass.
The Aermotor Company, Chicago, Ill.
Carter Densmore & Co., Boston, Mass.
Hibbard & Ajax Cycle Works, Chicago, Ill.

The last-mentioned firm makes a very creditable display of bicycles and shows the only American wheel here. At this booth our flag is majestically displayed, but nowhere else is it to be seen on the exposition grounds.

An English company makes a good exhibit of some fifty different pieces of hand and steam laundry machinery and utensils, from the ordinary clothes wringer to the heaviest and largest steam washers and ironers. A German manufacturer of steam-laundry machinery also makes a fair display. Reference is made more especially to this class of machinery as it applies to an industry yet in its infancy in this section of Belgium, which, I am informed, is gaining rapidly in popularity. I am told that the agents of the English company have within the past two years furnished two complete steam laundries in this city and some ten in this vicinity, and that they have just closed a contract with one of the largest local hospitals to furnish the machinery for a complete steam laundry. The agent of the German firm has just closed a contract to furnish the machinery for a laundry at Antwerp.

It is admitted by dealers here that American laundry machinery is far superior to either the English or German makes, and it would not be difficult to find an energetic, reliable house to accept an agency; in fact, I am quite sure such an agency would be sought for. One apparently serious complaint made by dealers is that they can not succeed in doing business directly with the manufacturers, and that to deal through middlemen brings the cost so high that they can not introduce the machinery in competition with English and German makes. Our manufacturers should give this their attention.

A very novel exhibition is made by one of the industrial schools. It comprises a set of maps representing the different cantons of this province. River, canal, and railroad routes and principal cities are carefully noted, and miniature manufactured articles are attached to indicate the production and industry of the various cities or localities. On the spot where Ghent is indicated there is attached a piece of loaf sugar, a bottle of beer, a bunch of flowers, a spindle of cotton, a spindle of flax, samples of linen and cotton goods. To the city of Lokeren there is attached a piece of rope, a package of cordage, and a bottle of wheat; to the prairies of East Flanders, cattle and sheep. Maps containing manufacturing centers have miniature locomotives, cars, wagons, chairs, tables, etc., attached.

The Kongo Free State display is made in a separate building. It is rather small, consisting of goods manufactured for the Kongo, as well as native products, weapons, implements, and photographs. The principal exhibits are cotton, linen, and woolen fabrics, to show the quality of goods in use and the manner of putting up packages

of convenient size and weight for shipment. There are four sizes, as follows:

Length.	Width.	Thickness.	Weight.
Feet.	*Ft. In.*	*Ft. In.*	*Pounds.*
3	0 9	0 9	44
3	1 0	0 9	77
3	1 5	1 0	176
3	1 5	1 8	176

These packages are covered with heavy burlaps and bound with four hoop-iron bands 1¼ inches in width.

This city is the center of a very large textile industry, and has a heavy export trade of such goods to the Kongo.

The exhibition as a whole is a credit, not only to the province, but to the Kingdom. The displays are effective and the decorations in excellent taste.

RICHARD LE BERT,
Consul.

GHENT, *June 21, 1899.*

IMPORTS OF COTTON GOODS FROM MANCHESTER.

I give below a table of the exports of cotton yarn, cotton velvets, cords, and fustians from this district to the United States for the first half of the years 1898 and 1899, shipments recorded monthly, which I think will be of interest to a large class of our manufacturers and merchants.

Exports of cotton goods to the United States.

Month.	Cotton yarn.		Cotton velvets, cords, and fustians.	
	1898.	1899.	1898.	1899.
	Pounds.	*Pounds.*	*Yards.*	*Yards.*
January	123,702	152,225	512,617¼	834,796¼
February	172,721½	160,899½	550,289¾	575,910½
March	230,461½	202,893	574,088½	1,053,861¼
April	183,536½	129,914½	739,576½	1,107,923
May	154,089	186,893¾	551,508	1,570,520½
June	81,675½	206,479	491,419	1,535,170¾
Total	946,186	1,039,304¼	3,419,499	6,678,181¾

WILLIAM F. GRINNELL,
Consul.

MANCHESTER, *July 5, 1899.*

EGG INDUSTRY IN GERMANY AND RUSSIA.

The egg trade in Germany and Russia has grown astonishingly within the past few years. The following tables will show the extent of this growth:

German import from adjoining countries.

Year.	Quantity.	Value.
	*Tons.**	
1880	15,493	$3,498,600
1889	48,516	9,805,600
1898	105,836	16,993,200

* Space measure, 40 cubic feet.

Nine-tenths of this import came from Russia and Austria, smaller quantities coming from Italy, the Netherlands, and Roumania.

Russia's increased export in eggs, however, is something enormous.

Russian export to foreign countries.

Year.	Quantity.	Value.
	*Tons.**	
1881	4,580	$257,000
1894	62,596	9,252,000
First 11 months of 1898	118,608	17,990,000

* Space measure, 40 cubic feet.

The raising of poultry for the production of eggs has become an important factor in Russian husbandry. Not only is this the case in districts which border on the frontier, but in the interior of the country as well. In 1894, freight on the Russian railroads was reduced. This gave the infant industry a new impulse. The completion of the Kaiser Wilhelm Canal enables the dealers to ship eggs direct to Hamburg without change of bottom. From this port, transshipments are immediately made for England, Belgium, and the Netherlands.

JNO. F. WINTER,

ANNABERG, *June 19, 1899.* *Consul.*

ADVICE TO IMPORTERS OF SICILIAN ESSENTIAL OILS.

I would suggest to all dealers in essential oils who purchase under chemists' certificates to take a sample in the presence of witnesses, immediately upon arrival of the goods, seal it, and send, in the little bottles made for that purpose, to the chemists Messrs. G. H. Ogston & Moore, of Messina (who put goods under their seal after

analyzing them), at the same time asking for an analysis. My reason for this is that I have discovered that even after the copper has been sealed, it can be most successfully tampered with. A minute's contact of a hot iron with the line of solder which encircles the copper where it begins to taper will remove sufficient to allow two little holes to be made. If the copper is then placed on its side, the contents will easily run off. The adulterant turpentine is then readily injected by a syringe. A few passes of the soldering iron soon destroy all traces of the work.

I do not wish to be understood as saying that any particular exporter has adopted this method to defraud, but I do say that it can be done. Every honest shipper will be glad to learn that the second analysis agrees with the first. When the importer finds that it does not, the remedy rests in his own hands.

I would suggest that samples be sent, not only of goods now on the way, but also (if any of the coppers are still intact) of shipments received as far back as April. If a fraud has been committed, an empty copper would probably show on the inside the marks where the fresh solder entered the holes.

A safeguard against such frauds would be to make it a condition of the contract that the chemists send one-half of the original sample, after analysis, to the purchaser under their private seal.

CHAS. M. CAUGHY,

MESSINA, *June 10, 1899.* *Consul.*

PETROLEUM INDUSTRY IN RUSSIA.

The St. Petersburg Messenger of Finance, in an article on the petroleum industry in Russia, states that English capitalists have recently invested $9,000,000 in the petroleum-producing territory between the Caspian and Black seas.

Since 1892, when new regulations concerning the petroleum industry were published, more than thirty firms have received permits from the Minister of Agriculture and Crown Domains to engage in the petroleum industry in Russia, and applications are being made for permission to develop the petroleum-bearing territory on the Apsheron Peninsula, some 300 miles north of Baku on the Caspian Sea.

The increased demand for fuel caused foreign capitalists to look carefully after the residues, which has resulted in a decrease in the amount of kerosene exported and a greater demand for petroleum fuel at good prices; this increased 900 per cent during the past six years and is still growing, notwithstanding the competition of pit coal and wood. The demand for petroleum fuel from the factories

in and about Moscow has more than doubled in six years and now amounts to millions of tons annually.

The consumption of liquid fuel on locomotives has increased tenfold in nine years and on river steamboats fourfold in eleven years, while the consumption of coal increased 113 per cent and of wood 58 per cent.

In order to meet the demand for liquid fuel, Baku must increase her output from 242,000,000 poods to 360,000,000 poods (3,903,226 tons to 5,806,451 tons), and, in order to supply the increasing demand from the interior of Russia, it will be necessary to increase the output of residues to 8,064,516 tons in the near future. This development will require a further investment of $8,000,000, which must come from foreigners.

The slow development of the export of kerosene is explained by the fact that Baku finds it more profitable to produce liquid fuel and is also due to the competition of the Standard Oil Company; but, unless the export of Russian kerosene is increased, as the demand from the interior is small, the liquid fuel will contain too great a percentage of dangerous volatile products for profitable trade.

The increased production of kerosene is necessary to supply the fuel residues, and, while the same will meet strong opposition from the United States, success is only possible by Russia adopting the Standard Oil Company's methods for saving, transporting, and delivering the product, which will require a largely increased capital. It is estimated that the amount of $10,000,000 will be required to successfully compete with the American oil in England alone.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *July 5, 1899.*

TEXTILE PLANTS IN RUSSIA.

FLAX.

It is a well-established fact that Russia has for several years past furnished nearly four-fifths of the flaxen tow consumed by all countries. The growth covers a large territory, which is worked by peasants, and as a rule the product is of inferior quality. Its export, however, is a source of great wealth, and has been one of the principal factors in the industrial development of Russia. As a greater extent of land is covered by flax than by any other product, Russia is in the foremost rank as a flax producer.

Owing to the fact that flax thrives under severe climatic conditions, it was planted extensively in Russia at a time when she had

very little commerce with European countries. In the western districts and Baltic provinces, the Upper Volga in Jaroslav, Kostroma, and near Lake Ladoga, flax is grown with a view to the production of tow. The more fertile lands of Tchernoziom yield an excellent seed.

In 1886, a surface of over 1,000,000 hectares (2,471,000 acres) was covered with flax, and the yield was 275,000,000 kilograms (606,265,000 pounds) of flaxen tow, against 225,000,000 kilograms (496,035,000 pounds) produced by all other countries combined. In 1897, more than 2,300,000 hectares (5,683,300 acres) were cultivated, and the yield was 562,585,000 kilograms (1,240,274,891 pounds). In Slanez and Matchenez, flax is the principal crop, and the statistics of the Russian Department of Agriculture for 1897 mark the yield of these two districts alone as being over 260,000,000 kilograms (573,196,000 pounds). The exportation in 1897, which was almost entirely through Europe, amounted to $39,179,000; and it was this superabundance of Russian flax which arrested the production in Belgium, where it had been grown under most favorable conditions and with large profit.

Germany is the natural outlet of the Russian commercial current; she imported more than $6,555,000 worth of Russian flax in 1897 and exported about $2,702,000 worth. Notwithstanding the present defective condition of the flax industry, and although there is no protective tariff on flax in Russia, competition is impossible.

HEMP.

Hemp covers much less acreage than flax in European Russia; this is due to the climate. The principal plantations are in Tchernoziom, Koursk, Orel, Toula, Kalouga, Riazan, and in the western districts—Kovno, Vilna, Smolensk, and Mohilew.

During the past few years, the surface cultivated has not increased very rapidly, but it is worthy of note that while the culture of hemp is almost stationary in all Europe, the Russians have stepped to the front. Eighty-six per cent of their hemp lands are in Tchernoziom and must become a source of great profit; and central Siberia, connected by rail with the centers of textile industry in European Russia, also produces largely.

In 1897, Russia sold more than 5,000,000 hectoliters (14,185,000 bushels) of seed and 200,000,000 hectoliters (567,400,000 bushels), in round numbers, of tow, of which 98,000,000 hectoliters (278,126,000 bushels) came from Siberia. The harvest of all the rest of Europe amounted to only 220,000,000 kilograms (485,012,000 pounds). The Russian exportation into Germany was quite equal to that of flax, and the total sales amounted to $6,834,000.

COTTON.

Russia is about to become a large producer of raw cotton. The Trans-Caucasian country has cotton lands in the valley of Koura, near Elizabethpol, in the high plain of Erivan, as well as in other localities, and judicious irrigation will extend these fields.

Russian Turkestan is, however, destined to become the greatest cotton-producing section, and will shortly be a rival of Egypt. The Commercial Society of Central Asia, through the aid of the Minister of Colonies, has introduced "upland" cotton into Ferghana, Samarcand, and the oases of Syr-Daria and Amou-Daria. It is planted by the side of native cotton of inferior quality, and each year marks an advance in surface sown, as well as yield. Irrigation will reclaim from the steppes of Turkestan several hundred thousand hectares for agricultural purposes. The greatest drawback is the climate, which is exceedingly dry in summer, while the autumn is marked by early frosts.

In 1890, Russian Turkestan had 60,000 hectares (148,260 acres) planted with "upland" cotton, of which 35,000 hectares (86,485 acres) were in Ferghana. This land yielded 14,880,000 kilograms (32,804,448 pounds) of cotton. There were planted with native cotton 31,960 hectares (78,973 acres), which yielded 5,500,000 kilograms (12,125,300 pounds). In 1893, 175,000 hectares (432,423 acres) were planted with "upland" and 25,000 hectares (61,775 acres) with native cotton. In 1895, the production amounted to 80,000,000 kilograms (176,368,000 pounds) of "upland" and 9,335,000 kilograms (20,579,941 pounds) of native cotton.

Russian Turkestan should produce more than 120,000,000 kilograms (264,552,000 pounds) of textile growth. To this may be added the production of Bokhara and Khiva, which are under the control of Russia, and which export more than 40,000,000 kilograms (88,184,000 pounds) of cotton. Through the Trans-Siberian road, Russia will inevitably drain the basin of Yangtze Kiang in China of a part of its harvest of 290,000,000 kilograms (639,334,000 pounds), until the textile industry of the Chinese is better organized than at present.

Without counting the contribution from the latter source, Russian mills consumed more than 150,000,000 kilograms (330,690,000 pounds) of raw material in 1897. Russia can already do without Egypt, India, and the United States. This is not true of Germany, France, and England. In less than fifty years there will be a great cotton mart in Europe, much more closely connected with the seats of production and better able to control them than any of the markets of the present day.

SILK.

In Trans-Caucasia and in Turkestan (Khokand) Russia grows silk also, and, in 1897, exported $187,596 worth of cocoons. She will buy largely, however, for many years to come from Italy, China, and Persia, as well as through Germany. In 1897, she bought $6,555,000 worth of raw silk. The extension of the Trans-Caspian Railroad from Samarcand to Khokand and the completion of the Trans-Siberian road will, however, change these conditions.

W. P. ATWELL,
Commercial Agent.

ROUBAIX, *June 27, 1899.*

RUSSIA'S FLAX AND HEMP CROPS OF 1898.

Official reports of the Central Statistical Committee state that the harvest of flaxseed in 1898 was 14 per cent greater than in 1897. During 1897 the whole of Russia, including Siberia, produced 652,264 tons, as against 744,585 tons in 1898. This increase is due to good crops, as the area in flax and hemp in 1898 decreased.

Although the crop in 1898 was better than in 1897, it was much below that of 1896, the reports showing a decrease in twenty-nine out of the seventy governments where flax and hemp are cultivated.

The decrease of area under flax is explained by the fact that the bad harvest in 1897 prevented the farmers sowing flaxseed, largely because the profit from the rise in prices was realized by the commission agent.

The harvest of hemp seed in 1898 was equal to that of 1897. The whole of Russia produced 283,870 tons in 1897 and 282,290 tons in 1898—1 per cent less; this decrease, though small, was a serious loss to commerce.

The following table shows the area under flax and hemp, the harvest of same, and the net remains of seeds, excluding the amount of seed sown, in the whole of Russia in 1896, 1897, and 1898:

Year.	Area.		Total harvest.		Net remains.	
	Flaxseed.	Hemp seed.	Flaxseed.	Hemp seed.	Flaxseed.	Hemp seed.
	Acres.	*Acres.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1896	5,477,023	2,026,875	912,797	377,518	706,455	274,053
1897	5,725,990	2,039,047	652,264	283,876	517,942	186,725
1898	5,354,015	2,045,543	744,585	282,294	565,439	180,895

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *July 18, 1899.*

FAILURE OF CROPS IN SOUTHERN RUSSIA.

The failure of the crops in many of the provinces of European Russia is a much more serious affair than is generally admitted. Nowhere has it been more complete than in the province of Cherson, which has within its borders the two largest exporting ports in the Russian Empire—Odessa and Nicolaiev. During the famine year of 1891–92 this province suffered severely, though not as much as at present. . The famine year found the peasant farmers without any reserve stock of grain, and consequently without seed for future sowing or the means of subsistence until the next harvest. Their distress, however, had been provided for by the erection of store-houses in the peasant villages, in which every house owner had been obliged to place a certain quantity of grain for eventual public alimentation. Later on, the system was found to be inconvenient, and the grain was sold and the proceeds invested in interest-bearing bonds. Thus was formed the so-called "fund for the public alimentation." During the critical condition of affairs in 1891, the administrations of the districts purchased grain and distributed it to the peasants at cost price for food and sowing purposes, and a time was stipulated for the repayment of this relief.

This year, a conference has been called in this province (Cherson) to take measures to deal with the situation. The questions to be considered are the degree of failure in each district separately, the seed necessary for sowing the fields, the amount of Government assistance which will be required during the year, and the amount of cash in the public alimentation and other funds at the disposal of the administrations for relief purposes. I am glad to be able to state that the amount of food supplies and funds on hand and available is quite large, amounting to more than 2,000,000 rubles ($1,028,000) at the present time. These funds will be applied to the purchase of grain for seed and also to the relief of distress. In addition to these funds, the province has another means at its disposal which will largely help to alleviate suffering. This is the organization of public works. A special fund has been kept in this province for the purpose of giving employment to peasants, under circumstances which the present year presents. The fund for the purpose is not large; still, it will be of service. The road-making fund will also be brought into requisition. Russian rural roads are perhaps the worst in the world, and Russian military roads the best.

A very important question to be solved is how the working stock

and other animals are to be saved, the hay crop being a complete failure. Hay and fodder is now at such a price as to be beyond the reach of the peasant farmer. Horses and oxen are being sold far below their value, and evidences of great distress are visible, even at the beginning of summer. Stock raisers, who are among the more wealthy classes, are selling their stock for what they can get. It is not an easy task to sell, and the supply is constantly increasing.

THOMAS E. HEENAN,

ODESSA, *June 24, 1899.* *Consul.*

FRENCH WHEAT CROP OF 1899.

The conditions for an abundant crop were most favorable early in the season, but the heavy fall of rain toward the end of June and early in July somewhat modified this prospect.

The north and northeast have suffered most; in the center and south the rain was beneficial, causing the grain to swell. It promises to be heavy and of excellent quality.

The North, Pas de Calais, and especially the Somme (the most productive districts) will suffer a diminution of at least 10 per cent when compared with the yield of last year; in the Aisne and the Oise, there is less cause for complaint. In the departments of the Allier, Cher, Indre, and Indre-et-Loire, in the Vendée and Charente Inférieure, which are next in importance after the Department of the North as grain producers, the yield will be quite equal to that of 1898. Sarthe, Mayenne, Maine-et-Loire, Yonne, Nièvre, the Côte d'Or, a part of Loiret and Eure-et-Loir, form a group which ranks next in importance to the preceding one; the yield in these districts will be less than that of last year.

The south, which had a mediocre harvest in 1898, promises well this year. Dordogne, Gironde, Tarn-et-Garonne, and Lot will yield from 20 to 40 per cent more than during 1898.

If the weather from this period proves favorable to the grain, which has been beaten down by storms in the north, a harvest only slightly inferior to that of last year may be expected. The regions that have suffered the most are precisely where the yield to the acre is the greatest, and it is in these regions that the falling off will be most felt. This, however, will be almost made up by the yield in regions that are less productive naturally, but which cover an extremely large acreage.

The reserve on hand in the beginning of August will be above the normal. It is not large in the north, but is good in the east, center,

west, and even the south. Taking the Government estimate of 131,000,000 hectoliters (371,778,000 bushels) as a basis, the production may be counted at 125,000,000 or 130,000,000 hectoliters (354,750,000 or 368,940,000 bushels), if the weather is favorable for harvesting. To this estimate 12,000,000 to 15,000,000 hectoliters (34,000,000 to 42,000,000 bushels) may be added as representing the reserve on hand from the last harvest.

W. P. ATWELL,
Consul.

ROUBAIX, *July 18, 1899.*

TRANSPORTATION FROM MARSEILLES.*

The names of forwarding agents in Marseilles are C. Chanal, 40 rue de la Republique; Flachot & Crotte, 20 Boulevard Maritime; J. Getaz, 40 rue de l'Arsenal; Giraud frères, 42 rue Sainte; Marie Moreau et Cie., 42 rue Sainte A; Puthet et Cie., 6 rue Joseph Autran.

The only railway company operating in Marseilles is the Paris, Lyons, and Mediterranean.

The only considerable inland navigation company in the city is the Compagnie Générale de Navigation, 10 Quai de la Tourette. This company does an extensive business between Marseilles and the various cities on the Rhone, and extends its operations via canal as far as Havre.

The French regular steamship lines attached to the port of Marseilles are as follows:

Compagnie des Messageries Maritimes.
Compagnie Générale Transatlantique.
Compagnie Marseillaise de Navigation à Vapeur.
Société Générale des Transports Maritimes à Vapeur.
Compagnie de Navigation Mixte.
Compagnie Française de Navigation à Vapeur.
Compagnie de Navigation Marocaine et Armenienne.
Compagnie Nationale de Navigation.
Compagnie E. Caillol et S. Saintpierre.
Compagnie E. & M. Castaldi.
Axel Busck & Co.
E. Frisch et Cie.
Compagnie Française de l'Afrique Occidentale.
Amb. Artaud.

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*This report was made at the request of a New York export association, which has received Advance Sheets.

A list of foreign companies having regular sailings from this port is annexed:

Name of company.	Lines or ports of call.
Compagnie Générale des Bateaux à Vapeur à Hélice du Nord (Chanal, agent).	Marseilles, Bordeaux, Dunkerque.
	Marseilles, La Rochelle, and Dunkerque.
Société Navale de l'Ouest (Gondrand frères, agents).	Havre-Antwerp, Lisbon, Barcelona, Port Vendres, St. Louis du Rhone.
Compagnie Havraise Péninsulaire (Caillol et Saintpierre, agents).	Havre, northern and Pacific ports.
	Diego Suarez, Tamatave, Mauritius.
	Alicante, Valencia, Palma (Balearic Islands).
Peninsular and Oriental Company (MM. Estrine et Cie., agents).	India, China, and Japan.
	Australia.
Compagnie Florio-Rubattino (agents, Gondrand frères).	Sardinia, Sicily, Alexandria, and Tunis.
	Italy and the East.
Compagnie Sevillane (A. & L. Hains, agents)	Barcelona, Valencie, Alicante, Carthagena, Almeria, Malaga, Cadiz, Seville.
Compagnie Vinuesa de Seville (Ex Espaliu) (Vidal et Cie., agents).	Barcelona, Valencia, Malaga, Cadiz, and Seville.
Compagnie Transatlantique de Barcelone (Vidal et Cie., agents).	Barcelona, the Antilles, Mexico, Venezuela, Colombia.
	Barcelona, Montevideo, and Buenos Ayres.
	Barcelona, Dakar, Gold Coast, Monrovia, Fernando Po, and Gaboon.
Compagnie Valenciana (J. B. et A. Artaud frères, agents).	Barcelona, Valencia, Alicante, Almeria, Aguilas, and Malaga.
Compagnie Ybarra de Seville (Rodrigues Ély frères, agents).	Marseilles to Bilbao, stopping at principal Spanish ports.
Compagnie Rotterdam Lloyd (agents, Ruys et Cie., place de la Bourse, 11).	Dutch Indies.
Johnston Line	Constantinople and Odessa.
Bibby Line	Rangoon.
Glynn Line	Liverpool.
Hall Line (Watson & Parker, agents).	Kurrachee.
The Persian Gulf Steamship Company (Savon frères, agents).	Regular service between London and Marseilles, Port Said, Bunder Abbas and Bushire, Bassorah, Bagdad, etc., and vice versa.
Compagnie Puglia (Gondrand frères, agents)	Genoa, Leghorn, Naples, Messina, Catania, Brindisi, Bari, Barleta, Venice.
Compagnie Hambourgeoise (Frisch, agents)	Hamburg.
Anchor Line (John G. Todd, agent)	Bombay-Marseilles.
	Marseilles-Liverpool-Glasgow.
	Marseilles-New York.
	New York-Marseilles.
Adria, Compagnie Royale Hongroise de Navigation Maritime à Vapeur (Philippe Perrella, agent).	Service between Fiume, Trieste, Marseilles, and vice versa.
	Points touched: Fiume, Trieste, Bari, Catania, Riposto, Messina, Palermo, Naples, Leghorn, Genoa, Port Maurice, Nice, and Marseilles.
Orient Line (Worms & Co., agents)	Naples, Port Said, Suez, Colombo, Albany, Adelaide, Melbourne, and Sydney.
Nippon Yusen Kaisha (Japanese) (John G. Todd, agent).	London and Antwerp (semimonthly service).

The regulations of the port of Marseilles are as follows:

ARTICLE 1. Vessels under flags, entirely or partially loaded, coming from foreign ports or ports in French colonies other than Algeria, will pay quay dues in French and Algerian ports according to the following tariff:

One franc (19.3 cents) per net register ton if the total number of net metrical

tons (2,204.6 pounds) of goods discharged or loaded is greater than half of the net registered tonnage of the vessel.

Fifty centimes (9.6 cents) per net register ton if the total number of net metrical tons of goods discharged or loaded is equal to or less than half of the net registered tonnage and exceeds the quarter of the said registered tonnage.

Twenty-five centimes (4.8 cents) per net register ton if the total number of metrical tons of goods discharged or loaded is equal to or less than a quarter of the net registered tonnage and exceeds the tenth of said registered tonnage.

Ten centimes (1.9 cents) per net register ton if the total number of metrical tons discharged or loaded equals or is less than a tenth of the said registered tonnage.

These dues will be reduced by one-half in the case of vessels discharging goods when these vessels come from ports within the limits of "cabotage internationale" (international coasting), as defined in Article I of the act of January 30, 1893 (*i. e.*, Franco-European trade, including African and Mediterranean ports of the Mediterranean and Black seas). The conditions will be the same for vessels loading goods when such vessels are bound to ports within said limits.

Vessels performing in the same port operations of discharging and loading will be charged separately for such inward and outward operations in accordance with the rates above indicated.

ART. 2. In the case of a steamer calling at successive ports, the quay dues at each port will accrue in accordance with the rules indicated in the first article; but in no case will the total amount of same, payable by vessel on the same voyage, exceed 1 franc per ton on the net registered tonnage.

These rates are reduced to 50 centimes on vessels complying with the conditions set forth in paragraph No. 6 of the preceding article.

ART. 3. In calculating the operations (of discharging and loading) for tonnage, each passenger landed or embarked will be considered as equivalent to 1 ton of goods.

The same will be the case for each head of "big" cattle, horses, or mules. Each head of "small" cattle will equal one-fourth of a ton. Passengers' luggage, including their personal provisions for the voyage, will not be taken into account in the making up of the tonnage of the goods discharged or loaded.

ART. 4. The quay dues imposed in the preceding articles will, in Algerian ports, be collected only on goods, passengers, animals, and carriages discharged.

ART. 5. The taking in of stores and bunkering will not be considered as commercial operations (*i. e.*, will not of themselves incur payment of quay dues).

ART. 6. Are annulled: Article 6, of the act of January 30, 1872; article 7, of the act (finance) of July 29, 1881; and the first paragraph of the act (finance) of December 28, 1875.

MARSEILLES PORT DUES.

Pilotage, 10 to 15 centimes (1.9 to 2.8 cents) per net registered ton of vessel. Prices vary according to distance at which pilot takes ship, and is same for inward and outward bound ships.

Health office dues, 10 centimes (1.9 cents) for coasting ships and 15 centimes (2.8 cents) for long-voyage ships per net registered ton.

Octroi dues are a municipal tax on the consumption of food stuffs on board ship while in port. The amount depends upon the number of crew and length of stay in port. The charge is estimated and runs from 30 to 100 francs ($5.79 to $19.30).

Fire guardian, 2 fancs (38 cents) per night.

Health office interpreter, 5 francs (96 cents)—obligatory.

Local dues, 6 centimes (1 cent) for the support of the chamber of commerce per net registered ton on all ships; all passengers landed, 1 franc (19.3 cents) per person.

Brokerage—a legal tariff exists, but is never followed. The amount of this charge is always a matter of private contract.

Cost of discharging, 50 centimes (9.6 cents) per ton on grain, seeds, and general cargo in bulk or in bags; coal, 1.25 francs (24 cents) per ton.

ROBERT P. SKINNER,

MARSEILLES, *July 15, 1899.* *Consul.*

USES OF TOBACCO JUICE IN FRANCE.

In reply to a Kentucky correspondent,* Consul Van Buren writes from Nice, July 13, 1899, as follows:

Information as to total exports, number of factories, output, etc., should be procured in Paris. The Government has a monopoly of the manufacture and sale of tobacco and its extracts in this country. Detailed statements can be obtained only from the Direction Générale des Tabacs au Ministère des Finances in Paris.

There is a tobacco factory here, and its director has informed me that no extracts of tobacco are manufactured. All tobacco shops, however, which in France are specially licensed and privileged, are compelled to keep a stock of what is called "tobacco juice, rich in nicotine and guaranteed." This is manufactured, as far as I am enabled to ascertain, by the tobacco monopoly in Paris. This article, it is claimed, possesses the following advantages:

(1) It is free from all matter susceptible of fermentation and keeps for an indefinite period of time if in closed vessels.

(2) It contains no resinous matter and is almost transparent; therefore it does not injure or clog the spraying machines, and does not stain plants or flowers or the wool of sheep.

(3) It has a Government guaranty as to the proportion of nicotine it contains, which never varies.

This product, sold throughout this department, as well as in other parts of France, is packed in tins of 5 liters (1.3209 gallons), 1 liter (1.0567 quarts), and half a liter (0.5283 quart), at the following prices:

	Francs.	
5 liters	13.50	=$2.61
1 liter	3.00	= .58
Half a liter	1.75	= .34

* To whom Advance Sheets have been sent.

It is claimed that this product contains from five to six times the quantity of nicotine that may be found in ordinary tobacco juice, and that therefore one-fifth to one-sixth of the quantity will accomplish the object to which it is applied.

For spraying purposes, the product is employed in the proportion of one part of juice to one hundred parts of water. It is stated that the spraying of plants should be done after sunset, and that they should be sprinkled with clear water on the following day. For fumigating hothouses, the proportion is one part of juice to five of water. The mixture is sprayed upon bricks or iron sheets heated to a temperature sufficiently high to produce rapid evaporation. It is claimed that insects and parasites are absolutely destroyed by this process. It is said, furthermore, that the preparation is most efficacious for the destruction of all insects on cattle, as well as being a preventive of all manner of parasitic attacks. For these purposes, the juice is mixed in the proportion of one part to twenty of water. It is recommended that the lotion be not used as a general bath, but applied gradually on limited surfaces. It should not be brought in contact with sores or erosions of any kind. The benefits accruing from the use of these mixtures are said to be greatly enhanced by mixing 100 grams (3.5274 ounces) of soda crystals with each liter (1.0567 quarts) of diluted juice.

Regarding the use made of this product in this department, I may say that it is rapidly coming into general favor for all the purposes mentioned above. I have seen it used with complete success in curing what is popularly called here "le noir." This parasitic affliction is not confined to orange, lemon, olive, and other trees, but has been most disastrous to such vegetables as potatoes, beans, pease, tomatoes, etc. I have seen whole rows of orange trees so thickly coated with parasites that every leaf appeared coated with soot (hence the popular appellation "le noir"); and I have been enabled to verify the fact that three or four applications of the lotion have prevented the disease from attacking new leaves and have caused the disappearance of the black deposit upon those attacked. A proprietor of an olive grove here has assured me that the use of the juice in combating "le noir," which has destroyed many thousands of olive trees in this department, is most costly, but at the same time very efficacious.

The spraying machines used to spread the mixture are the same as those employed in applying sulphate of copper to vineyards. I have tried to ascertain whether the use of tobacco juice would not be more desirable in treating vines for the cure of the "oidium"—a parasitic disease of the vine leaves—than sulphate of copper, but I have not found anyone who has experimented with the two treat-

ments. It would appear, at first sight, that tobacco juice would be the better, as sulphate has always been considered a preventive of attacks upon the grapes themselves, especially after the bunches are completely developed, whereas the oidium attacks only the leaves and indirectly the vitality of the plant.

MEASURES AGAINST THE PLAGUE AT MARSEILLES.

The steady westward advance of the plague, which has now reached Alexandria and from its Egyptian point of attack menaces Europe, is directing attention to Marseilles as the great Mediterranean port, from which much is expected by way of preventive measures and feared by way of possibilities. Certainly, at this moment, the city is in better sanitary condition than for years. As for precautions against the importation of disease, I may cover the whole subject by translating a letter written at my request by the director of health for the city and port. That officer addresses me as follows:

MARSEILLES, *June 21, 1899.*

To the Consul of the United States of America, Marseilles.

DEAR SIR: In reply to your inquiry of June 20, I beg to inform you that the sanitary police regulations contained in the decree of January 4, 1896, are applied in their entirety to arrivals from contaminated countries.

Such ships as arrive without having on board any sick persons, and have not had such sick persons on board after their departure from the port suspected, are admitted to free entry after—

(1) Disinfection of linen, clothing, bedding, etc., in sweating rooms under steam pressure. (NOTE.—Many ships, and particularly the fleet of the Compagnie des Messageries Maritimes and the greater part of the fleet of the Peninsular and Oriental Company, are provided with sweating rooms and perform this operation while en route, thus diminishing their time of detention at Frioul, the port of quarantine for Marseilles.)

(2) Individual medical inspection of all passengers and crew.

(3) Disinfection by pulverized sublimate or other chemical process of the compartments of the ship, including particularly water-closets, common living rooms, holds, etc.

(4) The water in the hold, after first being mixed with sulphate of copper in solution, is discharged before the arrival of the ship in the basins of the port of Marseilles.

(5) The store of drinking water is thrown out.

(6) Passports (sanitary) are delivered to each passenger, and the authorities of the countries to which they are bound are advised of their coming, in order that a surveillance may be continued for ten days, counting from the date of departure from the contaminated port.

As to measures applied to infected ships, they are set forth under Title VII of

the regulation of 1896. Until now, we have applied them only in cases of yellow fever (last year) and of cholera.

Such, in brief, is our method of procedure.

Receive, dear sir, the assurance of my most distinguished consideration.

ANTONIN CATELAN,
Director of Health.

Under Title VII of the French regulations I find that cases of sickness on infected ships are immediately landed and isolated until their cure. Other persons are landed and kept under observation for a period depending upon the sanitary state of the vessel and the date of the last case. The duration of this observation can not be more than five days for cholera and seven days for yellow fever and the plague, counting from the date of landing or the date of the last case of sickness among crew or passengers. All operations connected with the maintenance of public health are performed for Marseilles on the Island of Frioul, an admirably situated and equipped locality, several miles out in the harbor and in full view of the city.

ROBERT P. SKINNER,
MARSEILLES, *June 26, 1899.* *Consul.*

THE PLAGUE SITUATION IN EGYPT.

The plague situation in Alexandria, Egypt, is now such that rigid quarantine measures against importations from that city have been adopted at about every important Mediterranean port except Marseilles. In this city, ships arriving from Alexandria are at present subjected to inspection and disinfection as described in a recent report to the Department of State. The state of affairs in Alexandria is thus made clear in a letter to the Semaphore, the commercial authority of Marseilles, bearing date of June 26, since which time daily reports of cases and deaths have been made:

The epidemic neither increases nor diminishes. One or two new cases are reported almost daily, with occasional intervals when none are reported. A fact worthy of remark since the outbreak of the plague is that the disease does not seem to be propagated by direct contact. There is no record of repeated cases in the same house. Immediately upon the sending to the hospital of individuals suspected to have the plague, all those who have been allowed to approach them, and especially those who have inhabited the same houses, are sent to a lazaret outside the city. It seems inexplicable that no suspected case has broken out among those who are known to have been in direct contact with individuals now down with the disease.

The malady seems to attack certain classes of persons. Until now almost as many Greeks as natives have been taken with it. At the most one or two wives of

natives have been attacked. As to the Greeks, most of the cases are young children of 13 to 14 years of age, grocers' delivering boys usually, and never more than 30 years of age. This seems most extraordinary. The hypothesis that the disease has been carried by comestibles seems most unlikely, because cases of plague have occurred among those who certainly did not use products bought of the grocers.

In a total of twenty cases among the natives, ten police guards are included, who took the contagion in the houses first infected. The others now sick are scattered in all quarters of the city between which the corelation seems to exist. Considerations such as the foregoing create in some minds doubt as to whether the malady now prevailing is really the plague.

The municipality and the sanitary service of the city display tireless zeal in the present situation. Measures of prevention have been taken on every hand. The city is divided into quarters, and at the head of each are two physicians. Visits are made to homes of natives, and invalids suspected are immediately removed to the hospitals, and the most minute precautions are then taken to prevent the spread of disease from the suspected habitation. As I have explained, all those who have been in contact with the suspect are sent to a lazaret.

In order that too great a hardship may not be imposed, all persons put into quarantine and thus prevented from working are paid a small sum daily. By this course families of suspects are kept in a state of contentment.

A premium of 2 francs (38 cents) is given to any individual who will inform the authorities of cases of plague, and a premium of 1 franc (19 cents) is offered for the head of every rat dead of the plague. Until the present, nobody has claimed this last premium. The prize is too small to attract men who might otherwise take the consequences of coming into contact with the disease. Although the natives are skeptical as to the contraction of disease from rats, they are not courageous enough to run the risk of danger.

ROBERT P. SKINNER,

MARSEILLES, *July 6, 1899.* *Consul.*

TRADE CONDITIONS IN PERSIA.

Under the caption "Germany's trade with Persia," a writer in a leading Chemnitz paper points out this Empire's position in that country. He says, among other things, that Germany is very poorly represented in Persia. In the northern part of the Shah's dominions are no German houses at all. In the south, quite recently, a German company had made business connections, but as yet to little or no purpose; since to do business in Persia a knowledge of language, customs, and habits of the people is absolutely necessary. The imports—which, by the way, are very considerable—are almost entirely in England's hands.

Persia, says the writer, who has lived eighteen years in Shiras, is not very rich. The population is made up, for the most part, of nomadic tribes that move from one grazing place to another. In the

midst of these vast grazing tracts are the larger cities. In Teheran, the capital, one finds the richer classes. Bushire and Bender Abbas are ports where goods enter for transmission to the interior by means of caravans. The carrying is done by mules and camels. Roads and means of transportation are very primitive, but it very seldom happens that a caravan is robbed. Commerce is active. The imports are sugar in boxes and bags, candles, iron, cloths, cotton goods, ironwares, stonewares, copper, tea, indigo, leather, articles of luxury, etc. In articles of luxury, the prospects for a large business are excellent.

To establish oneself in Persia, a large capital is almost indispensable. One needs from $40,000 to $50,000. The Persian does not pay cash. He never wants less than three months' credit. To sell on such long time, one should have considerable local information. It is hard to get facts as to a firm's or a merchant's standing. Sales for cash are possible only when very small quantities are disposed of—when the supply is small and the demand large. Money in Persia pays from 12 to 18 per cent, and merchants seldom if ever do business on a basis that pays less. Europeans are always ready to sell, since 6 per cent is the best they can expect at home, and credit sales pay well. It takes two and one-half to three months for goods to arrive in the interior of Persia after they leave London. Thus, the goods are two months in transit, are sold on three months' time, and before the merchant in London gets his money seven or eight months have passed.

German houses, says this merchant of Shiras, shrink from sales when the Persian merchant puts his time of payment months ahead. Because of this, business is very seldom done by German houses. Besides, Germans, who have no good representative in Persia, run great risks. Their hesitation to hand over goods to unknown parties is reasonable. Business, therefore, with all its profits, remains in English hands. Another point to be carefully considered by parties desiring to do business in Persia is that a house must have everything on hand from a button to a big Krupp gun.

Russia is rapidly rising to a very important place in trade, especially in central Persia. The Russians, however, do not come themselves, but are represented by Persians or Armenians. They sell large quantities of Russian glass and stone ware. In these lines, they have no competitors—first, because the importation via Bagdad, because of Turkish tolls, is too expensive, and, second, because the goods come from the neighboring Russian frontier provinces and meet Persian needs. For instance, samovars, cheap mirrors or looking-glasses, drinking glasses, etc., are sold. German merchants might do a very large business in beet sugar, since it is preferred to

the English and Russian. Up to date, France has furnished this article (beet sugar).

England is engaged in an effort to obtain better roads. The English consul in Ispahan demanded, in his last report, the intervention of his Government to get the Persian Government to do something in the line of roads, and his efforts were successful. South and West Persia have no roads; North Persia, only two. Of these, the one from Ispahan to Rescht was built by Russians. A road is being built between the capital and Ahwaz. This will run down to the Persian Gulf and cheapen freight rates to the interior. In spite of every obstacle and difficulty, England's exports to the Persian Empire are increasing.

United States exporters may perhaps profit by these suggestions. We might send cheap cottons, sugar, candles, iron, ironware, stoneware, copper, leather, and fancy articles.

J. C. MONAGHAN,

CHEMNITZ, *June 23, 1899.* *Consul.*

CONGRESS OF CHARITY AT PARIS.

The Department has received a note from Ambassador Cambon, dated Washington, July 15, 1899, to the effect that an international congress of public assistance and private beneficence is to meet in Paris from July 30 to August 5, 1900. The French Government is to be officially represented, and foreign governments are requested to send delegates to the congress. A circular issued by the promoters has the following extracts from the general regulations of the congress:

The questions discussed during the sessions of the congress will be the subject of printed reports, which will be distributed to members at least fifteen days before the opening meeting. So far as possible, each question will be treated by French writers, foreign writers, and general writers. These writers will be chosen by the commission of organization. Other questions relating to public assistance and private beneficence may be submitted for discussion. Authors are requested to send papers to the general secretary three months before the opening of the congress.

The congress comprises four sections: (1) childhood; (2) the sick, the infirm, the incurables, the aged; (3) the able-bodied poor, other relief than that of assistance by furnishing work, general questions; (4) works of assistance by furnishing work. Other subjects to be considered are: The working and efficacy of relief at the home; compromise between public and private assistance; treatment and education of children in reform schools, schools of correction, etc.; character of works of relief by furnishing work; should these not be considered works of private beneficence? assistance to indigent consumptives (measures of relief, whatever the medical treatment may be).

The language of the congress will be French. Only members are permitted to submit communications, to be present at the sessions, or take part in the discussions. The fee for membership is 20 francs ($3.86).* It is to be devoted to payment of the publication of the lectures, etc., delivered in the congress.

The adhesion of all persons interested in relief work, public or private, is requested.

REPORT OF FRENCH STEAMSHIP LINE.

Consul Thackara, of Havre, under date of July 13, 1899, sends an analysis of the report of the Compagnie Générale Transatlantique (French line) for 1898. It appears that the net value of steamers, real estate, etc., on December 31, was $22,438,377, as compared with $23,872,686 on December 31, 1897; a decrease of $1,434,309.

The total receipts for 1898, including the bounties and subsidies received from the Government, were $9,149,662; the total expenses for 1898, $7,915,646. The receipts for 1897 were $8,883,398, and the expenses $7,647,784. From the net earnings, a dividend of 15 francs ($2.895) per share—par value 500 francs ($96.50)—was declared.

There was a diminution in the receipts of the line to New York of $318,483, due to the comparatively small number of American tourists going abroad, to the increased competition of rival lines, and to the *Bourgogne* disaster.

The number of passengers carried in 1898 was 201,297, against 163,049 in 1897. The amount of merchandise in 1898 was 665,468 tons; in 1897, 776,286 tons. In 1898 11,191,061 parcels were carried; in 1897, 10,764,884. The number of postal parcels in the two years was 759,191 and 602,239, respectively. The value of bonds and specie carried in 1898 was $31,904,973; in 1897, $28,913,757. The number of voyages in 1898 was 1,052, against 1,015 in the preceding year.

The increase in the number of passengers in 1898 was chiefly owing to the larger number of emigrants carried. This is the result of the efforts of the company to build up this branch of its trade by establishing new agencies in the different parts of Europe.

Great difficulty is being experienced by the company in obtaining the necessary metal work for the construction of the two new steamers, owing to the congested condition of the steel-manufacturing plants in France. It is expected, however, that the *Lorraine* will be ready for launching in September, and the *Savoie* at the commencement of 1900.

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*A copy of the form of membership, transmitted with the note from M. Cambon, is filed for reference in the Department of State.

The company has recently purchased the twin-screw auxiliary cruiser *Patriota* from the Spanish Government. This vessel, which was formerly the *Normannia* of the Hamburg-American Line, will be named the *Aquitaine*, and will run between Havre and New York to replace the *Bourgogne*.

LIFE-INSURANCE COMPANIES IN GERMANY.

The twenty-seventh annual report on the condition of German life-insurance companies shows how steadily these institutions have been gaining ground. I give the following information and statistics for the year 1898:

Of the 42 German life-insurance companies, 20 are joint-stock companies and 22 have the mutual-benefit plan. During the year 1898, 188,873 applications, representing a capital of $179,003,010.38, were made to the companies as a whole. From this number, the 20 joint-stock companies received 108,033 applications, representing $95,482,304.65. The 22 other companies received 80,840 applications, covering a capital of $83,520,705.73. Of this number of new applications, the following were accepted: The 20 joint-stock companies accepted 83,616 applications, representing a capital of $72,011,771.38; the 22 mutual-benefit companies accepted 64,611 applications, covering a capital of $65,687,537.09. The aggregate number was thus 148,227, representing a capital of $137,699,308.47. The joint-stock companies, therefore, rejected 24,417 applications and the mutual-benefit companies 16,229, being a total of 40,646, or 21 per cent of the entire number of applications. During the year 1898, the joint-stock companies transacted business of $6,324,234.29 more than the mutual-benefit companies.

During the last five years, namely, 1894–98, the 42 companies did a combined business as follows:

Year.	Number of policies.	Insurance.
1894	131,248	$112,076,592.28
1895	134,934	118,807,234.75
1896	139,045	125,259,624.20
1897	143,970	132,791,436.23
1898	148,227	137,699,308.47
Total	697,424	626,634,195.93

This shows a gradual increase of 8.1 per cent in the number of applications, and an increase of 8 per cent in the actual business done during the five years above mentioned.

The mortality for 1898 of those carrying life-insurance policies

was very favorable to the companies. The outlay for deaths and other expenditures fell $4,593,400 short of the amount allowed for such matters. At the close of the year 1898, the 42 companies had 1,625,299 policies in force. The assets of all the companies represented a capital at the close of the year of $1,482,449,042.

ERNEST L. HARRIS,
Consular Agent.

EIBENSTOCK, *July 18, 1899.*

BUSINESS FIRMS IN BERGEN.

In trying to work up an extensive or even a partial export trade from the United States to Norway, our American manufacturers must remember the following facts:

At the present time, American goods are very little known in this part of Europe. Our competitors—the English and German merchants, especially the German—either have regular lines of samples here, or send salesmen who understand the Scandinavian language. Of course, it is very difficult to introduce new customs into such a conservative country as this, but I think (and I have personally investigated the matter during the last year) that if our manufacturers would establish a sample room in two or three of the larger cities in the Scandinavian Peninsula, a large trade could in time be worked up between the two countries. Merchants and dealers here show a preference for our goods, but they naturally like to see samples of the goods to know what they are buying. Several negotiations that I have had on hand have fallen through, because the exporters in the United States not only refused to send samples, but refused to allow the goods to leave the factory before they received the money. Dealers here will not pay for goods when they do not know what they are buying. It is safe to ship goods when the consignee gives bank references.

Another very important point to remember is that we have to compete with English and German merchants, who give from sixty to ninety days' credit. If United States merchants expect to do business here, they must be willing to give the same length of time.

I give below a list of the principal business houses in this city, arranged according to their respective lines:

Artists' materials.

F. Beyer & Co.
Bennet's Tourist Offices.
Karl Nordbye.

Agricultural implements.

Annas Berle & Co.
H. I. Scharffscher.

Asphaltum.

Ottesen & Co.

Brass and iron beds.

Joh. Brögelman.
B. Emil Hansen.
Sundt & Co.

Bath tubs.

Axel Algaard.

Bicycles.

L. H. Hagen & Co.
Carl Bischoff.
I. R. Fenden.
I. Milne Grieg.
W. Thomson.

Brass piping, faucets, etc.

Bergens Metalvarefabrik.
Eivind Grieg.
Axel Algaard.

Canned goods and groceries.

Torvald Mohn.
August Faye.
John H. Alvar.
Conrad Nordstrand.
O. Pedersen.
Olsen & Gundersen.
Christopher Brun.
E. Ellingsen.
C. Kröepeliens Enke.
Sandvik & Co.
Albert de Doncquers.
R. N. Solaas.
Mohr & Giertsen.
Georg H. Grung.

Candies.

Conrad Nordstrand.
E. Ellingsen.
Albert de Doncquers.
Torvald Mohn.
C. Kröepeliens Enke.
Christopher Brun.
August Faye.
Olsen & Gundersen.

Carpets and matting.

Fleischer & Co.
Oluf Böhmer Olsen.
D. S. Halvorsen.

China and crockery ware.

Olaf Irgens Co.
Chr. Höeg.
I. Iversen.

Cigars and tobacco.

E. Ellingsen.
Evald Mathiesen.
Conrad Nordstrand.
C. Kröepeliens Enke.
Theodor Johannessen.
Hendrik Andersen.

Clocks and watches.

B. Knudsen.
Iversen & Co.
K. T. Finckelsen.

Dairy machinery.

Annas Berle & Co.

Dry goods.

D. S. Halvorsen.
Johan Petersen, jr.
Müller & Co.
Olsen & Rasmussen.
Sundt & Co.
Fleischer & Co.
Olaf Böhmer Olsen.
S. Sivertsen.
V. T. Börs Lind.

Drug stores.

Apotheket Nordstjernen.
Elephant Apotheket.
Löveapotheket.
Svaneapotheket.
Apotheket Ornen.

Electrical supplies.

Vestlandske Tekniske Bureau.
Irgens & Schuman.
Martin O. Nielsen.
Eivind Grieg.
Axel Algaard.

Fishing nets.

O. Nilsen & Co.
H. E. Schjött & Co.
Sunde & Hansen.
Chr. Campbell Andersen.
Bergens Notforretning.
Gerdt Meyer Bruun.
Ditlef N. Bruland.
Fagerheims Notfabrik.

Fishing rods, flies, etc.

L. H. Hagen & Co.
I. R. Fenden.
I. Milne Grieg.

Furniture.

P. Knudsen.
R. Abrahamsen.
K. M. Knudsen & Co.
M. Wik.

Flour and feed.

Gerdt Meyer.
Albert Mohn.
Hans S. Blydt.
Schelderup & Co.
Johan I. M. Reusch.
Naess & Co.

Gas fittings.

Axel Algaard.
Eivind Grieg.

Gent's furnishings.

John Walter.
Nicolaysen & Olsen.
Bergens Herrekvipering.
Carl Bischoff.
R. Rasmussen.

Glassware.

Olaf Irgens & Co.
Peter M. Kolderup.
Chr. Höeg.

Guns.

L. H. Hagen & Co.
I. Milne Grieg.

Hardware.

Andreas Kalland.
I. Berstad.
Gundersen & Moldestad.
N. P. Stender.
Wallendahl & Sön.
R. Nilsen, jr.

Ice.

Ice is exported from Norway, and it is only within the last year or two that ice-lifting machinery and tools have been introduced here.
I. E. Schelderup.
L. S. Wesenberg.
F. I. Ellertsen & Co.

Lamps.

Chr. Höeg.
Peter M. Kolderup.
Olaf Irgens & Co.
Krygers Magasin.

Leather.

Adolph Berg.
Iver Alvar.

Linoleum.

Fleischer & Co.
Oluf Böhmer Olsen.
D. S. Halvorsen.

Machinery and tools.

Paul Rieber.
Wallendahl & Sön.

Musical instruments.

A. Rauscher.
John Grieg.
Einar Kalland.
A. O. Hagen.
W. Harloff.
C. Rabe.

Optical goods.

Martin O. Nielsen.
E. Grönvold Meyer.
P. C. Krohn.

Paints and brushes.

Nicolai M. Nielsen.
Johan D. Eche & Sön.
Karl Nordbye.
Bendix M. Hjelle.

Perfumes.

P. Koch.
I. G. Jörgensen.
B. Holmberg.
I. Graarud.
I. E. Kindt.

Petroleum.

Vestlandske Petroleumskompagni.

Photographers.

Brödr. Larm.
Jacobsen.
Knudsen.
K. Nyblin.

Pork and meat.

Berent Friele & Sönner.
I. E. Mowinckel.
B. Kieding.

Railroad supplies.

Styrelsen for Statsbanernes Drift og Anlag. Address Christiania.

Sail ducks and ropes, etc.

Bergens Notforretning.
H. I. Schjött & Co.
Sunde & Hansen.
O. Nilssen & Sön.
Gerdt. M. Bruun.
Chr. Campbell Andersen.

Sewing and knitting machines.

W. Thomsen.

Shoe factories and dealers in boots and shoes.

Christopher Rogge.
Gottlieb Mae.
Bergens Skofabrik.
Gustav E. Hansen.
Carl Bischoff.

Stationery.

F. Beyer & Co.
Bennett's Tourist Offices.
Alvöens Papirfabrik.
C. Floor.

Surgical instruments.

Frantz Reusch.

Sporting goods.

I. Milne Grieg.
L. H. Hagen & Co.
I. R. Fenden.

Toilet articles.

P. Koch.
I. G. Jörgensen.
B. Holmberg.
I. Graarud.
I. E. Kindt.

Tobacco (leaf).

I. W. Nolte & Son.
D. G. Knoop.
Peter Mohn.

Wines.

Wingaard's Vinhandel.
Peter M. Kolderup.
C. Kröepeliens Enke.
Valentin Voss.
S. Chr. Hofstads Vinhandel.
Schumans Vinhandel.
International Bodega Co.
Albert de Doncquers.
Olsen & Gundersen.
H. H. Krohn Vinhandel.
Torvald Mohn.
E. Ellingsen.
Christopher Brun.
Conrad Nordstrand.
O. Pedersen.
R. N. Solaas.
Ingolf Fr. Olsen.
Wilhelm Olsen.
Bernt Kleppe.
August Faye.
Evald Mathiesen.

Bonnevie Angell's Bureau, Bergen, gives reliable information as to the financial standing of merchants for about 2 kroner (53.6 cents) in each case.

VICTOR E. NELSON,
Consul.

BERGEN, *June 21, 1899*

ANCHOVIES IN SCANDINAVIA.*

Anchovies, when prepared with salt, sugar, and spices, are first packed in barrels and remain in that state for about two weeks, after which the barrels are opened and the fish sorted into two sizes. The smallest size is used for canning, and is usually packed in three different-sized cans. The larger fish are packed in half barrels (a barrel contains 140 liters, or about 148 quarts), and are sold at prices ranging from 5 to 12 kroner ($1.34 to $3.42) for the half barrel (including barrel), the price depending upon the stock on the market and the demand for the goods. Anchovies prepared with spices will not keep for any length of time, rarely more than three or four months, after which period they are considered over ripe and are sometimes sold for any price that can be obtained. It is very difficult to place a market value on these goods.

Concerning the spices used on these goods, I would say that it is very hard to tell what qualities are used, but about a year ago, during my visit to Lysekil, in Sweden (where a large number of anchovies are packed), I was invited by one of the leading packers to inspect his plant, and I took the opportunity to examine the spices used and found them to be of a good quality. I was told that he used the same grade of spices in packing anchovies for domestic use as for foreign consumption, and that only first-class goods were used.

When quotations are asked from any of the anchovy packers in Sweden and Norway, they are given according to the quantity bought, the commercial standing of the buyer, and the terms of payment, and also, as I have said before, according to the amount of stock on the market.

It should be stated that there are, strictly speaking, no anchovies on the coast of either Sweden or Norway; the fish taken here are really sprats, and the proper name for this variety is "brisling" (*Clupea sprattus*).

Anchovies (*Engraulis encrasicholus*) are caught on the French and Spanish coasts.

VICTOR E. NELSON,

BERGEN, *July 17, 1899.* *Consul.*

*The above report was made in answer to inquiries by the Treasury Department, to which a copy has been sent.

CACAO CULTURE IN ECUADOR.

I am largely indebted to Señor Gonzalez-Bazo (secretary of the Guayaquil Chamber of Commerce), a prominent business man of this city, for the following article on cacao, which in translating I have condensed and revised.

GENUS, FAMILY NAME, ETC.

Cacao pertains to the botanical family of the *Malvacias bictnereaces;* it is the *Theobroma cacaö* of Linnæus, of which various species are found in Ecuador.

It is believed that cacao came originally from Mexico, where it was cultivated by the Aztecs long prior to the Spanish conquest. The history of Ecuador does not record when the plant was introduced here. It is stated that the annual production in 1741 was from 35,000 to 40,000 cargas of 81 pounds each.

Cacao in Mexico was called "cacari" or cascara quahuitl, and the product was called "chocolatl," from which the word chocolate is derived.

EXTENT OF PRODUCT.

Cacao is produced in five provinces of the coast:

Province.	Number of trees.	Yield.
		*Quintals.**
Los Rios	30,000,000	210,000
El Oro	6,500,000	60,000
Guayas	6,000,000	50,000
Manavi	4.000,000	30,000 to 35,000
Esmeraldas	700,000	8,000 to 10,000

* The Castilian quintal is equivalent to 101.61 pounds.

CLIMATIC CONDITIONS.

Cacao requires a very warm and humid climate—26° to 30° C. (77° to 86° F.)—and copious rain. Rainfall and heat generally determine the annual productivity; but in some years, despite favorable seasons, crops are poor, and vice versa. Strong winds cause damage, and large trees are planted to protect the cacao trees.

CHARACTER OF SOIL.

The soil best adapted for cacao plantations is one that is deep and moist, the root of this tree growing vertically downward to a considerable depth. Siliceous clay is especially preferred, on account

of the phosphoric acid and potash required by the bean. Banks of navigable rivers are selected generally because of transportation facilities, but important plantations are found at considerable distance from water ways.

HOW PLANTED.

Cacao is planted from fresh seed. Four or five are put in each hole, which are 5 yards apart, in rows. Formerly they were 2 or 3 yards apart, but experience has shown that this method does not give the plant sufficient air, light, and nourishment.

The preparation of land for a cacao plantation consists in clearing it of small trees, underbrush, and weeds, but leaving the large umbrageous trees. The space between the trees is planted in corn, arrowroot, or plantains, the latter in abundance, with the double object of affording shade to the delicate cacao plant and producing an immediate income. These crops are grown until the fifth or sixth year, when the cacao has reached a height of 8 or 9 feet, commences to bear fruit, and enters upon a stage of perfect vitality. Then, auxiliary crops cease to be planted and the ground is left clear, save for the umbrageous trees, which generally stand at intervals of 40 or 50 yards. The trees usually selected are the guabo, palo prieto, or guachepeli.

A grove of cacao, planted in rows at right angles, with the ground perfectly free from weeds, makes a plantation that is very attractive. There are, however, many irregular plantations, due to the presence of wild cacao trees in the forest at the time of clearing, propagated by the seed which monkeys and squirrels scatter. These trees, when matured, are not different from those planted by man and produce quite as well.

HOW CULTIVATED.

The cultivation of cacao in Ecuador is limited to caring for the plant until it reaches maturity, then cleaning and weeding once a year. In the first few years, the plant is pruned occasionally, in order that it may "run to fruit" more quickly. Manures have never been used, even where the ground has been cultivated for over a century, and no irrigation is practiced. The sediment spread over the land by the rains during the rainy season and the decaying vegetation appear to afford sufficient nutriment. In some haciendas, however, the proprietors pile up leaves and other vegetable matter found in the vicinity of the tree at its foot, and also rub down the bark with coarse cloths to destroy the adhering parasites.

In the primitive manner in which it is grown and harvested, cacao yields a good return on the capital invested; but, beyond doubt, if scientific methods were adopted, the increase in production would be large. At present, however, the planters are content to let well enough alone.

MATURITY.

In the sixth or seventh year, the tree commences to bear, but the pods at this time are very small and scarcely repay the effort to gather them. In the tenth year, the tree reaches full maturity. It then produces on an average 1 pound of dry cocoa of good quality. There are many trees which produce more, especially those which are isolated, some of which have yielded at one picking as much as 7 or 8 pounds. In the province of Oro (Machala), 1½ to 2 pounds per tree is the estimated yield. The tree is in bloom during the entire year, but most of the blossoms fall before fructification, which occurs twice a year, the time varying with the locality.

DESCRIPTION OF TREE, FLOWER, AND FRUIT.

The cacao tree grows to a height of 20 or 30 feet; its leaves are evergreen and lanceolated in form; the base of the main trunk attains a thickness of 8 to 10 inches; the bark is hard and of greenish coffee color. The blossom is very small, pinkish white, and waxlike in appearance. It grows directly out of the main trunk and branches. If it fructifies, the petals fall off, and from the stamens, in the course of from fifty to seventy days, an oblong pod is developed. This pod is of golden color, and contains some twenty to thirty-five grains of cacao, enveloped in a gummy liquid, which coagulates on exposure to air. The outer rind of this pod is dark or golden yellow in color and very hard, a sharp instrument being necessary to cut it open. Its size varies, according to the kind of cacao, from 8 to 15 inches long by from 2 to 6 inches thick. The outer rind is marked by longitudinal furrows, more or less pronounced, which indicate the interior arrangement of the seeds. Both the outer rind and the gummy contents of the pod are porous and blacken in color as soon as picked, and in Ecuador are of use only to fertilize the soil upon which they are cast.

The seed or bean of the cacao is about the size and shape of a large almond. It contains the active principles of theobromine, albumen, phosphates, fatty matter, and water. When dry, it is vitreous in appearance, covered by a skin more or less delicate, which is easily removed and which contains a distinct pellicle. The color varies from dark coffee to violet, the latter indicating an inferior grade.

HOW GATHERED.

As soon as the pods begin to ripen, they are removed with pruning knives, very sharp, and attached to the ends of long poles, which are lengthened by joints as often as required. As the twigs are very tough, the blow with this instrument must be strong and well

aimed, and the laborers must be experienced on account of the particular skill that is required and the fatigue that attends handling heavy poles sometimes 30 feet long, with the face continually upturned.

Wherever they can be reached, the pods are cut off with a machete. Considerable cacao is lost by the carelessness of the laborer and his dislike to bother with the pods in the upper branches.

HOW PREPARED.

The pods are heaped in piles by one set of laborers, while another cuts them open and extracts the contents. A sharp pruning knife is used, and the seeds are often damaged through carelessness. For extracting the gummy substance and the seeds, an implement made of a beef rib is used.

The drying is done on open platforms made of split bamboo and palms, where the cacao is exposed to the sun during three or four days, and, in order that it may dry uniformly and well, laborers are employed to tread it out with bare feet. If not well dried, the bean is apt to ferment, and if excessively dried it shrinks and finally turns black. The driers are provided with covers for protection against rain.

Attempts have been made to introduce drying machinery (steam), but at present not one plantation in Ecuador uses it.

HOW MARKETED.

When dried in the primitive fashion stated, considerable pulp yet adhering to the grain, the cacao is sacked and sent to Guayaquil to be sold in its natural state. Some merchants attempt to deceive the buyer by washing an inferior bean in achiote, which gives the skin the appearance of first-class cacao; but this practice is severely condemned by honest merchants and is seldom followed; nor is reddish earth used here, as it is elsewhere, for the purpose of preserving the grain from decomposition and of increasing its weight.

Reaching Guayaquil, the cacao is subjected to the cleaning process. Splinters, dirt, and defective beans are eliminated, and the adhering clusters of beans broken apart and dried several times before shipment. During this process, the cacao loses 4 to 5 per cent in weight. The sacks for foreign shipment contain from 60 to 70 kilograms (132 to 154 pounds) net. The largest portion of the crop is bought in advance by Guayaquil merchants engaged in this business, who loan considerable sums of money during the year for current expenses of cacao estates. Large capital is necessary, and the number of merchants engaged in the business is limited. Formerly, 12 per cent interest and 2 to 5 per cent commission were

charged on advances; but now, owing to competition, commissions are no longer asked and interest has been reduced to 8 per cent to planters.

AVERAGE PRICE OF PRODUCT.

The table which follows gives prices for the last forty-two years in the Guayaquil market. The advance in price, it will be noted, has kept pace with the decline in silver; so after all the bean brought in 1898 about what it did in 1857. For years, the bulk of the crop was shipped abroad on consignment. Later, foreign buyers supplied their wants through orders executed by commission merchants. Now the business is done on "firm cable offers," and the price is controlled by quotations from the leading world markets. The local rates are posted on the blackboard in the chamber of commerce, and the daily fluctuations recorded thereon. Competition of other countries seems to have had no visible effect either on prices or business. Ecuador sets the pace, being the largest producer.

Until the gold basis was adopted, exchange, which varied with the rise or fall of silver, was an important and harassing factor in the business. Now the rate is uniform. The Ecuadorian condor of 10 sucres is of the exact metallic value of £1. One sucre is therefore worth 48.665 cents in American gold.

Prices of cacao in Guayaquil.

[From 1736 to 1856 quotations were 4 to 5 pesos per 81 pounds.]

Year.	Price per 100 pounds.	Year.	Price per 100 pounds.
	*Sucres.**		*Sucres.**
1857	12.00	1878	17.60
1858	8.00	1879	17.60
1859	8.80	1880	13.60
1860	9.60	1881	12.00
1861	9.60	1882	14.40
1862	9.60	1883	16.00
1863	11.20	1884	16.80
1864	12.84	1885	17.50
1865	16.80	1886	20.00
1866	14.40	1887	17.00 to 20.00
1867	14.00	1888	20.00
1868	12.60	1889	15.60 to 20.40
1869	8.80	1890	12.80 to 19.00
1870	9.20	1891	13.20 to 24.50
1871	9.60	1892	20.00 to 24.80
1872	9.60	1893	21.00 to 25.60
1873	9.60	1894	17.00 to 26.40
1874	8.80	1895	15.60 to 21.00
1875	8.00	1896	17.00 to 22.00
1876	8.80	1897	17.40 to 29.50
1877	12.80	1898	25.00 to 30.50

*Owing to the fluctuating value of the sucre, as mentioned above, its equivalent in United States currency is given only for the last three years. Its average valuation for 1896 was 49.3 cents; for 1897, 45 cents; for 1898, 42.2 cents. In 1874 the sucre was worth 96.5 cents.

COST OF CULTIVATION.

The cost of cultivation is small, not exceeding 6 to 7 sucres per 100 pounds, delivered in Guayaquil. This includes management, cleaning, weeding, harvesting, drying, transporting, and every possible contingency except interest on the capital invested.

The first planting of cacao on an estate is usually done by laborers experienced in the business, who agree with the proprietor of forest land to plant and bring to a state of bearing a fixed number of trees at 20 to 30 cents per tree, payment to be made as soon as the trees are delivered. The laborers clear the land, use the timber at will, plant all sorts of catch crops for their own benefit, and even use the cacao product up to the date the proprietor requires them to deliver the trees. Contracts usually provide that the trees shall be delivered in first-class condition. From the time of delivery, the proprietor has but to keep the estate in order, collect the harvest, and enjoy the profits.

The tax on cacao estates is 1 mill on the assessed valuation. Taxes on production are local, and vary from 30 to 50 cents per 100 pounds. All cacao arriving at the port of Guayaquil pays the municipality 8 cents per 100 pounds, 5 cents of which is for the support of the university of Guayaquil, San Vicente College.

The export duty on cacao is $1.69 per quintal.

The expenses of the producer includes freight, varying according to distance from 30 cents to $1 per quintal, and unsacking, 5 cents per quintal. The taxes on production are usually paid in Guayaquil for producer's account.

ESTIMATED PROFITS.

The profits of a plantation depend chiefly on the quality of the land, management, and nearness to market.

Taking as a fair average 1 pound per tree, which is a certain minimum, a hacienda of 100,000 trees will produce 1,000 quintals, worth at the present market price $22,500; the expenses (maximum) would be about $7,000; and the net result per year would be $15,000 or more—a profit of from 40 to 50 per cent per annum on the capital invested, which will continue for an indefinite period, cacao trees lasting for several generations.

The price of a hacienda is governed largely by the market price of cacao. At present, a first-class hacienda would be worth $1.20 to $1.50 per tree, or a hacienda of 100,000 trees $120,000 to $150,000 silver. This price always includes uncultivated lands, improvements, and appurtenances of every kind, as well as the trees and the land they occupy; also, the assets in the shape of debts from peons and others, which generally reach 20 per cent of the total value. On the other hand, it is much cheaper for the investor to

buy a piece of new land and establish a plantation by the means above described. This would involve an expenditure of scarcely one-fourth of what would be required to purchase an already established hacienda; and it is thus that the largest fortunes in cacao planting have been made.

With $10,000 invested in buying land and making advances to sembradores, as the cacao planters are called, it is possible to plant 40,000 to 50,000 trees, which, when bearing, represent a value of, say, $60,000 and pay 12 to 15 per cent annually on this value.

The mortgage banks lend amounts up to half the value of estates, appraising them at the rate of 1 sucre per tree in full bearing. These banks lend money on warrants, charging 9 per cent interest and 1½ per cent commission annually, the proportion of amortization being in accordance with the length of the loan.

The price of land varies greatly and depends on the caprice or need of the seller. Land adapted to cacao cultivation covers an area of some 19,600 square miles in the coast provinces of Ecuador. A very small proportion of available land is now under cultivation, although there are large tracts adjoining important estates. In some provinces there are large tracts of Government lands suitable for cacao growing which are for sale at about $4 per hectare (2.4 acres), while private properties cost something like $15 a hectare.

The title to lands in Ecuador gives much trouble, being involved and obscure where they are not derived from the Government. In colonial times, grants of land were made for a small consideration or none at all, and the grantee and his heirs have handed down these properties without dividing them, so that to-day the owners hold fractional undivided parts of these original grants. Furthermore, the description of the property is generally defective because rivers have changed their courses and ancient landmarks disappeared since the original grant, so that it is impossible to determine its limits with accuracy. By a law made some sixty years ago, it was decreed that every share should represent $50, and that a shareholder could cultivate the land that he chose. This is the condition of many haciendas to-day, and is the sole title that the occupant has to the land he claims to own. There is also another grave complication where grants have been made to so-called communities or indeterminate groups of persons, who, by virtue thereof, have the right to cultivate any portion of the grant and thus come to hold it in fee simple, after an uninterrupted occupation for thirty years. It is likely that the Congress of 1899 will enact laws remedying these difficulties.

PRICE AND CHARACTER OF LABOR.

An unskilled laborer in Ecuador receives from 80 cents to $1.20 silver per day; the "tumbadores" (laborers who cut the pods off

the trees at harvests), being somewhat skilled, earn $1.20 to $1.60. There are no laws for protection of either laborers or proprietors in their respective relations.

The chief impediment to the rapid development of cacao plantations in this country is the system of peonage conciertos, or slavery in all but name, which is in vogue, whereby laborers are bought and sold openly for debts. There is scarcely a farm in this country that has not invested a large capital in advances to laborers. These advances are never expected to be repaid, nor is interest charged. The strong feeling of caste that exists between the wealthier and poorer classes is largely due to this system. The proprietors claim that the debts of the peons assure them a labor supply in a country where it is not plentiful, efficient, nor reliable; but large sums must be lost annually in interest, deaths, and desertions.

The laborer earns scarcely enough to feed, clothe, and house himself. No one takes any care to instruct him or to instill in him ideas of self-respect. He goes barefoot from the cradle to the grave, and is put to work as soon as he is strong enough to carry a machete. From their situation, it is hardly surprising that these laborers are blamed for insubordination, laziness, and other faults and vices. Many things contribute to brutalize them; and yet this is the class that produces the wealth of Ecuador.

ENEMIES OF THE CACAO TREE.

The enemies of the cacao tree are the ardillas, the monkeys, many species of small birds which attack the pod, and various parasites, all but two of which are as yet unclassified. These two are the "mosquilla" and "mancha." Continued vigilance protects the fruit from the parrots, animals, etc., but little has been done to extirpate the parasites of the trunk. There is but little cooperation among the cultivators; otherwise, by means of a small annual contribution, the diseases of the tree could be systematically studied, proper treatment learned, losses avoided, and gains increased each year.

CACAO PRODUCTION OF THE WORLD, 1897.

Country.	Quantity.	Country.	Quantity.
	Tons.		*Tons.*
Ecuador	22,000	Ceylon	1,650
Trinidad	10,000	Java	1,000
Other British West Indies	9,000	Guadeloupe and Martinique	800
Portuguese Africa	7,700	Santo Domingo	150
Brazil	7,500	Niger Coast	55
Venezuela	6,000	French Guiana	30
Dutch Guiana	4,500	Kongo	5
Haiti	4,000	Total	75,680
Colombia	3,000		

Mexico and the Central American republics produce only enough for local requirements. Ecuador's production was distributed among the provinces as follows:

	Tons.
Los Rios	12,000
Guayas	4,000
El Oro	3,000
Manavi	2,200
Esmeraldas	800
Total	22,000

The production in Ecuador has been increasing since 1836, as the following table will show. The total crop in 1899 will be nearly 30,000 tons.

Year.	Quantity.	Year.	Quantity.
	Quintals.		*Quintals.*
1836	109,185	1868	212,355
1837	85,201	1869	173,492
1838	71,990	1870	242,144
1839	121,597	1871	172,432
1840	140,669	1872	187,238
1841	114,102	1873	251,812
1842	67,090	1874	250,216
1843	154,634	1875	166,207
1844	85,741	1876	224,739
1845	97,290	1877	205,307
1846	112,020	1878	103,309
1847	120,736	1879	315,341
1848	210,074	1880	362,411
1849	143,347	1881	217,063
1850	110,660	1882	203,772
1851	95,670	1883	150,116
1852	139,655	1884	176,954
1853	132,430	1885	245,052
1854	109,921	1886	384,764
1855	150,897	1887	334,264
1856	133,736	1888	276,721
1857	147,169	1889	246,372
1858	198,187	1890	364,920
1859	136,187	1891	211,902
1860	167,617	1892	332,084
1861	186,781	1893	402,132
1862	160,261	1894	391,288
1863	164,011	1895	361,132
1864	114,506	1896	342,305
1865	142,671	1897	331,293
1866	225,077	1898	421,793
1867	197,260		

NOTE.—1 quintal=101 pounds.

CONSUMPTION.

The consumption has increased notably, and at a rate exceeding that of coffee. Prices will remain firm for an indefinite time, by reason of the long period necessary to bring new trees to maturity.

Consumption of cacao in four leading countries.

Year.	Germany.	France.	England.	United States.
	Tons.	*Tons.*	*Tons.*	*Tons.*
1894	10,000	.....	.....	8,800
1895	13,758	15,243	10,397	16,800
1896	17,123	15,280	10,984	11,600
1897	20,196	16,214	12,135	15,700
1898	.....	.....	14,325	14,200

USES OF CACAO.

Cacao is the principal element in chocolate and various kinds of confectionery. As an article of food, it is very nutritious, healthful, and stimulating. The "butter" of cacao is well known in medicine, and is used in the cure of skin diseases of all kinds with good results. The shells of the seed, roasted and ground, are used for "cocoa," a drink well known in the countries of the temperate zone, but used here only by the poorer classes. The pulp of the pod is used as fodder for animals. The popularity of cacao rapidly increases wherever it is once introduced, and neither fluctuations in prices nor attempts to substitute other products supposed to have the same or better qualities have affected its use in localities where it is once well known. The active principle of cacao is "theobroma," a powerful organic reagent.

FIELD FOR ENTERPRISE.

The possibilities of the cacao market are vast. The consumption has not yet begun, or at least made any headway, in the Asiatic countries, among which Japan, Persia, and British India may some day become important consumers. Chocolate is scarcely known in Oceanica, the British colonies, or Hawaii. Even in Europe, Russia, Turkey, and Greece are but recently becoming familiar with the product. As there has always been a ready market, no special effort has been made to extend the demand to new countries.

While some progress has been made in the utilization of the shell and pulp, no attempt of importance has been made to manufacture the product for export, although there is plenty of vanilla and sugar available for the preparation, and the profits would be considerable. Ecuadorian cacao, being somewhat bitter, has an advantage over that of other countries in assimilating a larger amount of sugar in the manufacture of chocolate, thereby reducing the cost of the product.

The consumption of cacao is increasing at the rate of 5 or 6 per cent annually, and inside of eight or ten years the demand will be greater than the supply. The attempts to introduce cacao on a

large scale in various other tropical countries has not been attended with favorable results. In no other part of the world can its cultivation be brought to the flourishing condition which prevails in Ecuador, where there is still a vast extent of land suitable for new and productive estates. All that is necessary is capital and energy, which will be welcomed and which will surely come when the railway to Quito is built, for no line of agriculture shows such tempting returns.

Analyses of cacao from four countries.

Results.	Mexico.	Colombia.	Venezuela.	Ecuador.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
Fats	53	52	44	49
Albumen	17	20	20	19
Theobromine	.....	2	2	2.4
Starch	11	10	10	12
Cellulose	8	2	2	6
Glucose	1	.....	.....	1
Mineral	.....	4	4	2.5
Coloring matter	2	.....	.....	2.5
Water	8	10	12	5.6
Acid crystals	.....	.....	6	.....
Total	100	100	100	100

EXCHANGE.

Prior to December, 1897, exchange rates on London and New York fluctuated with the price of silver. In November, 1897, the bankers and merchants determined to establish a fixed rate of exchange, pending the adoption of the gold standard by the Ecuadorean Congress, which occured twelve months later. Since that date exchange has been fixed at 100 per cent premium on London and 107 on New York, making the sucre equivalent to 2s., or 48.665 cents gold.

CHARGES ON CACAO IN TRANSIT, GUAYAQUIL, ECUADOR.

One of the leading exporters of cacao gives the following figures, being the regular scale charged on lots bought on account:

Shipment.

	Pounds (Spanish).
100 sacks of cacao, net weight	17,000
Tare	680
Gross	17,680

Charges.

	Sucres.	
Marking, thread, and sewing, at 2 cents* per sack	2.00=	$0.97
Storage, at 4 cents per quintal	7.07=	3.44
Unloading, at 5 cents per quintal	8.84=	4.30
Sifting, at 9 cents per quintal	15.91=	7.74
Launch, at 6 cents per quintal	10.61=	5.16

*Centavos.

	Sucres.	
Sack filling, at 10 cents per sack	10.00=	$4.87
Sacks, at 60 cents per sack	60.00=	29.20
Embarking, at 8 cents per sack	8.00=	3.89
Stamped paper	1.70=	.83
Export tax, at 1.6904 sucres per quintal	298.86=	145.00
Fire insurance on supposed valuation of 25 sucres per quintal, at one-half of one per cent	22.10=	10.75
Commission, at 4 per cent	195.56=	95.17
Total	640.65=	311.32
Add price of 17,680 pounds of cacao at 25 cents (Spanish)	4,420.00=	2,150.99
Total cost f. o. b.	5,060.65=	2,462.31

This is exclusive of charges for marine insurance and freight.

PERRY M. DE LEON,
Consul-General.

GUAYAQUIL, *June 28, 1899.*

PROPOSED PORT AT MONTEVIDEO.

On the 22d instant, the official paper of the Republic of Uruguay published the report of the Minister of Public Works relative to the proposed new port for Montevideo. The report was approved by the President and his cabinet and is now being considered by the General Assembly. The document is a ponderous one, and for the present I will give only the following epitome of its principal features:

Dr. Pena, the Minister of Public Works, states that when he came into office in March last, and the problem of the port was first formally presented to his consideration, he found that, by the operation of the law of July 14, 1894, amended by that of September 30, 1895, the technical part of the problem had already been very thoroughly dealt with, extensive surveys having been made by the commission appointed for the purpose under the direction and with the assistance of the eminent engineers Herr Kummer and Mr. Guérard. Herr Kummer was director of the hydraulic section of the Ministry of Public Works in Prussia and privy councilor and relator in the German Ministry of Public Works. Mr. Guérard was general inspecting engineer of roads and bridges in France, and director of the port works at Marseilles. The engagement of two such eminent specialists, who were assisted in their labors by the national staff of engineers, should place the Government beyond reproach as regards the technical side of the problem. The result of these surveys was the scheme elaborated by Mr. Guérard, which had been subjected to ample public debate and criticism from every point of view. The principal objections raised to the scheme had been reviewed at length

by Señor Varela in the memorandum published last year, and, for the most part, had been solved in favor of Mr. Guérard's scheme or by the introduction of minor alterations approved by Mr. Guérard. Reporting on this, in September, 1898, Herr Kummer had expressed his firm belief that the carrying out of the Guérard scheme was to be warmly recommended as absolutely the best for the port of Montevideo from the technical and economical point of view. On this side of the question, therefore, it was not necessary to say more.

Having justified the acceptance of the Guérard plan, the minister proceeds to examine with great minuteness the financial part of the scheme. The first estimate presented was for $16,000,000, which was considered far too high; but by omitting some of the docks and works originally designed, this was reduced to $12,000,000, another $700,000 being required for land constructions and annexes. Various schemes for raising the money were discussed, all more or less based on the port dues. After carefully considering these, Señor Varela resolved to put them aside, considering this basis impracticable, though the dues might be taken to form part of the fund required. For this reason the proposals of Messrs. Greenwood and Pearson were rejected in form, though accepted in principle, awaiting modifications. These proposals were withdrawn before the revolution of 1897.

Señor Varela suggested the restoration of the 2½ per cent additional import duty (which he proposed to increase to 3 per cent), and the establishment of a new export duty of 1 per cent. With these, he calculated on an annual revenue of some $996,000 as base for the financial operations. With this base, he proposed the issue of a loan of $15,400,000, at 6 per cent interest, and fixed annual amortization of £50,000, or, say, $235,000, the bonds of which would be issued gradually as required to pay for work done. Calculating the cost of the port at $15,000,000, the works would be terminated in eight years, at the end of which period there would be left in circulation bonds for $7,900,000.

The above was the original scheme, as outlined by Mr. Varela while occupying the office of Minister of Public Works. The amendments or changes suggested by the present Minister of Public Works are outlined in what follows:

The cost of constructing the port is reduced to $11,000,000, which will provide for a port accommodating easily a traffic of 1,200,000 tons. The technical expenses will consume some $590,000 more, or 5.36 per cent on the cost of the works, against 7½ per cent in the Madero Port of Buenos Ayres. To meet this expense, the proposed 2½ per cent additional import duty and an export duty of 1 per cent will be willingly submitted to by commerce and production, in view of the benefits the port will bring. His plan also allows for a gradual reduction of duties as the position of the treasury improves, or as increased commerce augments the revenue. These

two taxes will be set aside to form the port fund, under control of a special commission, and any part of the fund not employed will be invested in consolidated debt, so as not to remain unprofitable.

The expenditure required for the construction works is calculated as follows: First year, $200,000; second year, $700,000; third year, $1,400,000; fourth year, $2,400,000; fifth year, $3,000,000; sixth year, $2,300,000; seventh year, $1,000,000; total, $11,000,000. To this must be added $598,000 during eight years for expenses of the technical and financial commissions.

The revenue from the additional duties is calculated in round figures, taking as base the average of the customs revenue for the period 1896–1898, at $850,000 per year, or $6,800,000 in eight years. It is expected that $322,000 will be gained as interest on the surplus accruing in the first three years, $400,000 from sale of lands redeemed from the bay, and $1,100,000 for rent or revenue of the port in the last three years. These bring the total resources up to $8,622,000.

To meet the difference between this sum and the $11,590,000 cost of construction works and commission labors, Dr. Pena puts aside as superfluous the port loan of $15,000,000 proposed by Señor Varela and professes himself satisfied with the issue of port obligations to the nominal sum of $5,500,000, issued at 73 per cent of their face value. The service of these at 6 per cent interest and 1 per cent accumulative amortization would require $385,000 annually, against which there is a net revenue from the port fund of $500,000, leaving a surplus of $115,000. This entirely guarantees the service, though there will also be a revenue available from the light-houses for which an appropriation is about to be made by the State. The $5,500,000 obligations issued at 73 per cent will produce $4,015,000 cash; they will be extinguished in thirty years, and the difference imputable to interest is $7,535,000, which works out at 6¼ per cent on the sum received.

At the termination of the eighth year, the revenue of the port will give enough to meet the service of the obligations and the cost of preservation and repairs of the works, estimated by Mr. Guérard at some $100,000 per year. There will remain entirely free the revenue from the additional duties, calculated at $850,000, but which by that time should have risen to $1,000,000 per year, and this may be applied to extensions of the port, as provided in the scheme, or to any other purpose.

Dr. Pena concludes his memorandum by saying that the port works should be accompanied by other reforms and schemes, and by improved transit in the interior, which will stimulate production and reduce its cost, and thus help to feed the port itself.

Referring to this report by Dr. Pena, the Montevideo Times says:

For twenty years at least, the idea of building a new port for Montevideo has been more or less to the fore, it being generally recognized that the bay in its present condition, which is little better than that of nature, afforded neither the shelter nor the facilities requisite to sustain the commerce of the capital or to compete with the ports constructed at Buenos Ayres, La Plata, and Ensenada. Moreover, it was showing a tendency to fill up, and indeed is no longer available for modern ocean-going vessels of deep draft, which have to perform their operations of loading and unloading in the outer roads, a process both costly and inconvenient. The building of a new port is therefore an imperative necessity for the commerce of the Republic, to prevent Montevideo, the principal gate of that commerce, from sinking into a very secondary condition as compared with her Argentine rivals, though her natural location is far more advantageous than theirs.

One government after another has made more or less of an effort to solve the

great problem, but none with the least approach to success. For this repeated failure there were three principal reasons:

First. Continual political strife and instability, which absorbed the energy of the Government or prevented the carrying out of any settled policy.

Second. The want of any scientific basis for the plans; for, although numerous schemes were presented from time to time, they were, without exception, mere fantasies, based on superficial and unreliable surveys and data, or even on none at all, and therefore merely guesswork.

Third. The financial difficulty, which worked in more ways than one. It was generally imagined that the building of the port would cost at least $16,000,000 to $20,000,000—some of the schemes presented ran up to $40,000,000—and there was no government that had the financial ability or enjoyed sufficient confidence to procure the sum on any possible terms. Moreover, previous governments, without exception corrupt, regarded the building of the port as a means of personal enrichment; it was to be a big job—un gran negocio—and this factor swelled the expense, made it more difficult to raise the money, and caused the general public to regard their efforts askance and with distrust.

For the conquest of the second difficulty, we must thank the much-abused Barda Government. It was perhaps the only good thing it did for the country, and even this was done with much unnecessary extravagance. However, as Dr. Pena points out in his memorandum, the port scheme has now been placed, for the first time, on a scientific basis. The plans prepared by Mr. Guérard, and which have been accepted for the technical side of the scheme, are naturally open to criticism and objections, as such plans ever must be; but no one can say that they have not been carefully and scientifically prepared by competent persons.

The political difficulty we must pass over. For the moment, the horizon is sufficiently clear—clearer than it has been for many years—but there is no telling how long this may last or what incident may occur before the expiration of the eight years allotted to the building of the port, to arrest or even to overthrow the whole scheme. For this we must trust to Providence.

There remains the third or financial difficulty, and it has been the merit or the fortune of Señor Cuesta's Government to find a solution for this that seems both reasonable and practicable—we may even say highly favorable. If the new port can not be made on the present basis, we may doubt if it will ever be made at all. The credit of this solution may be divided between the present minister and his predecessor, Señor Varela, the latter initiating and the former completing it. They may specially be congratulated on having got rid of the idea, which had long been a stumbling block, that the port "must pay for itself"—that is to say, that it could be built out of any financial combination having for basis the proper revenue of the port.

As we understand Dr. Pena's financial scheme, it may be summarized as follows: The total cost of the port is reduced to $11,590,000, spread over a period of eight years—far less a sum than was ever imagined possible before. To meet this sum, he proposes to utilize the additional import duty of 2½ per cent and a new export duty of 1 per cent, yielding an annual revenue estimated at $850,000, or in eight years $6,800,000. At the end of the eight years these taxes will be freed, for application to extension of the port, for other administrative purposes, or to be rescinded altogether to the benefit of commerce and production. Other items—namely, interest on unemployed fund, sale of redeemed lands, and revenue from the port itself during the last three years—bring the port fund up to a total of $8,622,000.

But, as this fund is obviously insufficient to build a port costing $11,590,000, he proposes to make up the balance by issuing port obligations (or debentures) for $5,500,000 nominal, which, issued at 73 per cent, will yield $4,015,000 cash. The

service of these obligations, 6 per cent interest and 1 per cent annual accumulative amortization, will be $385,000 annually; but this will not be any addition at all to the present national-debt service, as it will be met, in the first instance, out of revenue accruing from the port fund (that is to say, the taxes above mentioned) and, at the end of the eight years, out of the revenue of the port itself, which will still leave sufficient to keep the port in repair. At the end of thirty years, the obligations will be entirely redeemed, leaving the revenue of the port free. As to the issue of the obligations, this is not expected to meet with any difficulty while the Government maintains the high degree of confidence it now enjoys, and, for the matter of that, they should be covered by local capital, as it is hoped will be mainly the case.

Minor details apart, this, then, is the outline of Dr. Pena's financial scheme, and for our part we applaud it warmly. The only burden it imposes on the community, it will be seen, is the maintenance for eight years longer of the additional 2½ per cent import duty, which already exists and is therefore no novelty, and the imposition of a 1 per cent export duty. Perhaps it might have been less prejudicial to general interests to have omitted the latter and made the import duty heavier; but in any case the burden is not a very heavy one and ought to be met willingly, in view of the great object.

Without doubt, if anyone had suggested two or three years ago that it was possible to build a new port for so little extra a burden as this, and without appealing to foreign capitalists for an extensive loan, increasing the national debt and the service thereof, or else so burdening the port itself as to nullify its benefits, he would have been regarded as a fool or a madman. And it may be put down as equally true that such a combination as the present would have been impossible to preceding governments, for reasons that we leave our readers to supply.

WILLIAM R. FINCH,
Minister.

MONTEVIDEO, *June 23, 1899.*

FOUNDRY AT MONTEREY.

The Monterey Foundry and Manufacturing Company is owned almost wholly by Mr. James Meehan, of Kentucky. Previous to the purchase of the Monterey foundry in 1896, it was not a success financially. Immediately thereafter, however, it was remodeled, renovated, and enlarged. It now has a complete modern plant of American manufacture and represents an investment of $125,000. The plant comprises a foundry, machine shop, brass foundry, hammer shop, pattern shop, and a wood-working shop. About 235 men are constantly employed in this enterprise. Most of the skilled mechanics are Americans, who receive on an average from $5 to $8 per day. The laborers are all Mexicans and receive from 75 cents to $1 per day.

A general specialty and jobbing business is carried on. The specialties consist of sugar mills of all sizes, mining and smelting machinery, engines up to 25 horsepower, brass cock and fittings of all descriptions, school furniture, architectural ironwork, etc. Lo-

comotives are repaired and rebuilt in this foundry. The pig iron used therein is imported from the United States, the scrap iron is procured in Mexico, the steel used in the manufacture of tools and machinery is imported from the United States, and wrought iron is purchased in the latter country and in Mexico.

The business of this foundry has doubled in the last three years and is daily increasing. Its annual sales amount to about $325,000. The duty of 1 per cent per kilogram on steam machinery levied by the Mexican Government and the duties on raw material, in some instances much higher, are offset by the employment of cheap labor and the difference of freight on the raw and finished material. About 1,000 tons of pig iron are imported annually by this company. The plant is desirably located, being equidistant from the three railroads entering this city, viz, the Mexican National, Mexican International, and the Mexican and Gulf. There are 7 acres of ground occupied by the foundry and owned by the company.

JOHN K. POLLARD,
Consul-General.

MONTEREY, *July 17, 1899.*

MANGANESE MINING IN BAHIA.

During the past six months, another mine of manganese has been opened up in the State of Bahia, making at present two mines in operation. They are each situated about 26 kilometers (16 miles) from the town of Nazareth, near the village of São Antonio de Jesus, on the Nazareth tramroad, a line of narrow gauge running from Nazareth to Amargosa, 79 kilometers (49 miles) distant and tributary to the rich Bahia coffee district.

Nazareth is a town of 18,000 inhabitants, situated near the mouth of the Jaguaripe River, 102 kilometers (63.4 miles) from the city of Bahia. A small side-wheel steamer plies between the two places, making three round trips per week.

The Jaguaripe River flows into an arm of the Bay of All Saints at a point nearly opposite the southern end of the Island of Itaparica. It is a very narrow and tortuous river, and is only navigable for small boats at high tide. The arm of the bay, if properly buoyed, would be navigable for ocean vessels almost to the mouth of the river. As it is now, they can get no nearer the manganese mines than Itaparica, about 18 kilometers (11.19 miles) from Bahia.

The deposits of manganese now being worked are separated only by a pack trail. The mines occupy the greater part of the crest of a hilly formation which stands about 375 feet above the surrounding valleys. The railroad is at its southern base.

The first of these mines to be opened is owned by the Brazilian firm of Cardosa, Silva & Co., and is superintended by an American engineer. It has been in operation about two years, and ships regularly to the United States. It doubtless contains several times more ore than its neighbor to the south. The ore occurs in seams and pockets of various thicknesses, appearing in some places as surface outcroppings, though the greater part of it lies at a depth of 6 feet or more below the surface, while quite a large seam has been discovered at a considerable distance below, following the steep incline of the hill. This is worked through a shaft sunk from the hilltop and tunnels running into the shaft from the hillside.

The ore is picked, blasted, or pried out, and is loaded on ore cars and taken to a large shed, where women and children are employed to sort and break off enough of the poorer quality to make the balance marketable. Here, it is loaded on larger ore cars and conducted by a gravity road winding in and out the hills for a couple of miles to the railroad, where it is loaded on the flat cars. The empty ore cars are hauled back to the mines by mules.

The other mine, owned by a London firm and managed here by Anderson, Rowe & Co., shipped its first cargo May 10, 1899. To work it, the earth is first removed and dumped over the hillside, which here almost amounts to a cliff. This exposes large areas of manganese, which is then removed with a pick, crowbar, or blast and loaded on ore cars, which are run by gravity to a central station, where it is sorted as at the other mine. From this central station, it is taken in automatic dump cars down an endless-cable gravity road to the railroad platform, about 920 feet distant, the full cars bringing the empty cars back.

After the ore has been loaded on the flat cars at the railroad platform, it is hauled to Nazareth, where it is loaded into small sailing craft, which take it down the river and up the arm of the bay to the sea-going vessel at anchor off Itaparica. Many times the ships are delayed by having to wait for the small vessels to bring the ore, as frequently there is little wind and the small craft have to be poled the greater part of the fifty-odd miles. The railroad, moreover, has not sufficient rolling stock to carry the ore with dispatch. It can not handle nearly as much ore as one mine can produce. This causes the mines to accumulate a cargo at Nazareth prior to chartering a ship, and necessitates additional expense for wharfage rents. The road is supplied with American engines, passenger coaches, and rails, but has mostly continental freight cars.

The amount of ore available can not be estimated with any degree of accuracy, on account of the irregularity of its occurrence. The estimated yield of the mine just opened was first placed at

176,000 tons, but I understand that more than this amount is now expected. The other mine is at present acknowledged to contain at least three times as much; so the total quantity in sight can be conservatively placed at 700,000 tons, with the chances of greatly exceeding that amount. I am also informed that the land in the vicinity of these two mines has been prospected, and that manganese has been found, though poorer in quality and much less in quantity than that now being worked.

The ore as found is the hydrous oxide of manganese known as "psilomelane." It is associated with irrecognizable schistic rock and averages about 42 per cent of pure oxide of manganese. Its principal impurity which affects its commercial value is the 11 to 12 per cent of silica which it contains. It also has from 3 to 4 per cent of oxide of iron; fractional percentages of lead, lime, sulphur, cobalt, phosphorus, and copper; between 12 and 13 per cent of alumina; and from 5 to 7 per cent of combined water.

The ore is removed and loaded under the inspection of the State government, which exacts an export duty of 7 per cent of the market value of the ore per ton. There is also the cost of feeding the three government guards during loading, the municipal taxes of Nazareth and São Antonio, railroad freight, lighterage to ship, wharfage at Nazareth, extra handling, mining and other expenses, which brings the actual cost of the manganese on board ship from 20 to 23 milreis per ton, the milreis to-day being worth 16¼ cents in United States gold, though it must be remembered that the cost in milreis is almost invariable, while its equivalent in gold or our money varies every day and often by sudden jumps, being higher to-day than it has been for some months.

The following table shows the manganese trade of this port for 1898 and 1899 up to date:

Shipped to—	1898.		1899.	
	Quantity.	Value.	Quantity.	Value.
	Tons.		*Tons.*	
New York	878	$8,500		
Baltimore			1,521½	$14,549.50
Philadelphia			3,000	22,000.00
Total	878	8,500	4,521½	36,549.50

I am glad to be able to state that all the manganese shipped this year, with the exception of 550 tons, has been carried in American ships, which earned 11s. ($2.68) per ton.

H. W. FURNISS,

BAHIA, *June 12, 1899.* *Consul.*

MINING AND RAILWAY CONCESSION IN VENEZUELA.

The Department has received from Consul Plumacher, of Maracaibo, under date of June 23, 1899, translation of a recent act of the Venezuelan Government renting the coal mines, railroads, and wharves of Guanta (State of Bermudez, Bolivar district) to Lanzoni, Martini & Co., of Rome, Italy. The contract, it appears, is to run for fifteen years, and the company will pay 104,000 bolivars ($20,012) annually in monthly installments and 50 centimes (9.6 cents) for every ton of coal extracted, this money to be reserved, in order to meet any future claims on the property. The company is not to increase the price of the coal used by the Government on its ships, which price is to be 25 bolivars ($4.82) per ton. The railway rates are to remain as at present. The Government is to keep closed, during the period of the contract, the port called El Rincon, or Gusman Blanco, except for such articles as earthenware, wood, fish, vegetables, and the like, which can not pay the landing and railway charges. The State of Bermudez and the Government are to have a rebate of 50 per cent of the passenger tariff for their employees on commission and on freight. Mail is to be carried by the railroad free. Work is to be begun within four months and finished in eight months more. Exemption from duties will be granted to the machinery and articles used in the exploitation of the mines and railway. Work is not to be suspended for more than six months, under fine of 20,000 bolivars ($3,860). A guaranty of 50,000 bolivars ($9,650) is to be deposited in bank by the company, to be forfeited in case of nonexecution of contract. The contract can be renewed for a further period of ten years after the expiration of the fifteen years if the company has complied with all the conditions specified. Native labor is to be preferably employed. The enterprise is to be free from taxes and employees are to be exempt from military service.

CUSTOMS CLASSIFICATION IN VENEZUELA.

Consul Plumacher, of Maracaibo, on July 7, 1899, sends translation of recent changes in the custom-house tariff of Venezuela, as follows:

ARTICLE 1. The importation through the custom-houses of the Republic of every kind of revolvers and cartridges for them is permitted, after the requirements set forth in article 5 of the customs tariff for introduction of firearms have been complied with. Revolvers will pay on entrance the duties applicable to articles of the eighth class, and the cartridges, those of articles of the sixth class.

ART. 2. The merchandise hereinafter specified will, on entrance through the custom-houses of the Republic, be appraised in the following form:

White printing paper, without glue or gum, comprised in No. 31 of the importation duties, will be placed in the second class and will pay 12½ centimes of 1 bolivar (2.4 cents) per kilogram (2.2046 pounds).

Olive oil, comprised in No. 22, will be placed in the third class and will pay 30 centimes of 1 bolivar (5.7 cents) per kilogram.

Common glass bottles, black or ordinary, clear, and the canecas (earthen jugs) commonly used for gin, comprised in No. 13, will be assigned to the first class and will pay 2 centimes of 1 bolivar (0.03 cent) per kilogram.

Art and work tools, with or without handles, and the wooden boxes for these tools, comprised in No. 65, will be placed in the third class and will pay 30 centimes of 1 bolivar (5.7 cents) per kilogram.

Augers and gimlets to perforate stones and logs, comprised in No. 113, will be placed in the second class and will pay 12½ centimes of 1 bolivar (2.4 cents) per kilogram.

Linseed oil, comprised in No. 183, will be placed in the third class and will pay 30 centimes of 1 bolivar (5.7 cents) per kilogram.

Groats of grits to make vermicelli, comprised in No. 233, will be placed in the third class and will pay 30 centimes of 1 bolivar (5.7 cents) per kilogram.

Pure butter, not mixed with other greases, comprised in No. 249, will be placed in the third class and will pay 30 centimes of 1 bolivar (5.7 cents) per kilogram.

Almond oils, comprised in No. 295, will be placed in the fourth class and will pay 90 centimes of 1 bolivar (17.3 cents) per kilogram.

Essences, perfumes, extracts of every kind, perfumed rice powders, and the like; scented water for toilets, pomades, cosmetics, oils, and perfumed soaps, comprised in Nos. 295, 300, 301, 343, and 380, will be placed in the sixth class and will pay 3 bolivars (57.9 cents) per kilogram.

Baize cloth, in pieces, and blankets of the same, comprised in No. 311, will be placed in the sixth class and will pay 3 bolivars (57.9 cents) per kilogram.

Twine, sail twine, and all threads twisted as a cord, white or colored cotton cords; soft, so as to be used for hand knitting or twisted as cords for other uses, comprised in No. 355, will be placed in the sixth class and will pay 3 bolivars (57.9 cents) per kilogram.

Satin, nainsook, calico, paplin, percale, cretonne, tarletans, pique, cotton merino, and fine cotton striped, or textiles with more than thirteen threads of warp and woof of 5 square millimeters, and all similar cotton cloth, comprised in No. 387, will be placed in the sixth class and will pay 3 bolivars (57.9 cents) per kilogram.

Hats of plush, black silk, high crown, and hats of this form of whatever material, including those of india rubber; patterns; felts and any other sort of made or half-made hats, comprised in No. 500, will be placed in the ninth class and will pay 24 bolivars ($4.63) per kilogram.

Chromium (metal) of every kind, comprised in No. 500, will be placed in the fifth class and will pay 1½ bolivars (28.9 cents) per kilogram.

ART. 3. The new customs tariff authorized by the National Congress in the ordinary session of this year will take effect the 1st of next September.*

*See CONSULAR REPORTS No. 227 (August, 1899), p. 748.

FOREIGN CORPORATIONS IN VENEZUELA.

Minister Loomis sends from Caracas, July 3, 1899, translation, in print, of a law recently passed by the Venezuelan Congress, as follows:

FOREIGN COMPANIES.

The Congress of the United States of Venezuela, decrees:

ARTICLE 1.

Foreign companies which wish to establish in Venezuela agencies or branches whether they have any operations in the country or not, and whether they have a collective name or there are dormant partners, must comply with the same requirements as national companies, and if they are companies having shares they shall register in the registry of commerce and in the office for registration of the place where the business agency is situated, and shall publish in a newspaper of the same locality the partnership deed and other documents necessary for the constitution of the company, according to the laws of its nationality, and a copy duly certified of the articles referred to of those laws. The statutes of the company shall also be left with the registrar to be filed among his records.

SECTION 1. Foreign companies established in Venezuela shall be bound by the provisions contained in article 26 of the civil code and of those of 101, 102, 103, and 104 of the code of civil procedure.

SEC. 2. Every modification of the partnership contract shall be registered and published in the manner provided in this article.

ARTICLE 2.

Insurance companies who enter into business in Venezuela shall establish at least one responsible agency in the capital of the Republic, and life-insurance companies shall give good security, equivalent to the total amount of the policies issued in the country. For the purposes of this guaranty the respective agency shall remit half yearly to the Ministry of Agriculture, Industry, and Commerce a circumstantial report of the insurances effected and of the amounts expressed in the corresponding policies. The security shall be registered in the subregistry of the district in which the agency is situated.

ARTICLE 3.

The failure to comply with the provisions of articles 1 and 2 by the companies referred to therein shall make personally and substantially liable the administrator's agents, representatives, and all other persons who may contract in their names, for all obligations made in the country.

SECTION. All persons who enter into contracts in the name of insurance companies which have not complied with the provisions of article 2 shall further suffer a fine of from 1,000 to 10,000 bolivars.

ARTICLE 4.

Foreign companies which now have branch agencies or exploitations in Venezuela shall comply with the provisions of article 1 within six months from the promulgation of this law. Life-insurance companies shall within the like period comply with the provisions of article 2.

Given at the Federal Palace at Caracas this 14th of April, 1899.

VENEZUELAN PEARL FISHERIES.

The pearl fisheries of Margarita, a large island off the north coast of Venezuela, have been known since the island was discovered by Columbus in 1498. The great admiral and his officers found the native women wearing strings of pearls, which they were glad to exchange for European trinkets of small value.

Pearl fishing has been carried on by the natives of the Island of Margarita as a commercial enterprise for upwards of three centuries, and there is no record that within this long period other than the crudest methods have been employed. The annual output of pearls is valued at about $100,000 on the island; that is the sum the fishermen receive for the pearls they gather. How much these same pearls are sold for in the European market there are no statistics to show. It is doubtless true that the fishermen are frequently underpaid for the gems they find and that in the past they have been shamefully swindled.

The pearls are bought by a very few dealers who purchase pearls and other valuable gems for European merchants. There are no restrictions upon the business of pearl fishing in Venezuelan waters, except that a tax of $24 a year is laid upon each boat. There are about four hundred boats employed in this industry, none of which are provided with diving apparatus. Each boat has a heavy metal "scoop-like" drag, which is allowed to scrape along the bottom of the sea till it is believed to be filled with oyster shells, when it is brought to the surface and its contents removed. Small, smooth shells are never opened, for it is known that they contain no pearls.

The best beds of pearl-bearing oysters are not immediately adjacent to the Island of Margarita itself, but are near some smaller islands close by. Around these islands are piled hundreds of tons of shells, the accumulation of centuries of pearl fishing. Many of these shells, I am told, contain a very clear mother-of-pearl, which may ultimately be found to have commercial value.

It seems probable that a few well-equipped, economically managed boats, prepared to send down divers and to make some explorations in search of new oyster beds, would reap substantial profits for a few seasons in these waters.

FRANCIS B. LOOMIS,
Minister.

CARACAS, *June 30, 1899.*

PROVISIONAL CUSTOMS REGULATIONS OF KYAO-CHAU.

The Department has received from Minister Conger, under date of Pekin, June 16, 1899, a printed copy of the provisional customs and harbor regulations of the German territory of Kyao-chau, to take effect July 1, 1899. The regulations read:

PROVISIONAL CUSTOMS REGULATIONS OF THE GERMAN TERRITORY OF KYAO-CHAU.

I.—Import, export, and transit.

(*a*) The import of goods into German territory is free, with the exception of opium, arms, and explosives, and the materials used in the manufacture thereof, which are subject to special regulations. (See § II and § III.)

(*b*) Foreign goods and Chinese commodities unaccompanied by duty-paid certificates imported from Chinese ports must pay tariff import duty on exportation from German into Chinese territory.

(*c*) Chinese goods imported from native ports accompanied by duty-paid certificate must pay coast-trade duty on exportation to the Chinese interior.

(*d*) Chinese goods arriving from the interior when exported pay tariff duty. The treaty provisions for prohibited goods are not annulled by this paragraph.

(*e*) Produce from the German territory of Kyao-chau, or goods manufactured therefrom or from any produce coming by sea into German territory, if accompanied by an official certificate of origin, are not liable to export duty upon shipment from Tsintau.

(*f*) Goods forwarded to or coming from the interior under transit pass must pay transit dues in addition to the import or export tariff duty.

(*g*) Transit passes and all other customs documents will be issued by the commissioner of customs at Tsintau.

(*h*) The treaty tariff rules are applicable to all goods carried by vessels of foreign type. The duties, taxes, or other charges collectible from Chinese-built vessels (junks) and the goods brought by them to Tsintau shall not be higher than those which have hitherto been or which may hereafter be levied in any port of the Kyao-chau territory or of the whole Shantung Province.

II.—Opium.

Opium can only be imported in original chests and must, on arrival, be reported without delay to the customs, who will supervise its transportation to the customs godown.

Upon payment of duty and likin, opium may be exported under customs seal and control from German territory, but is subject to special regulations.

III.—Arms and explosives, etc.

The importation into German territory of arms and explosives, as well as materials used in the manufacture of the same, is subject to special regulations.

The export of the same from German into Chinese territory is prohibited, except under special permit (Huchow) at the request of the Government, after furnishing a sufficient guaranty.

IV.—Import manifest and customs supervision.

Customs officers will board vessels on arrival. The masters of vessels arriving at Tsintau will hand to the customs officers a manifest for the merchandise on board and customs papers if coming from a Chinese port.

The manifest must be a correct statement of the aforesaid merchandise, and, if called for, fuller particulars must be supplied for statistical purposes.

Through cargo, and cargo intended for reexport to other ports, must be entered as such on the import manifest.

Consignees of import cargo are requested to furnish the customs, within one week of landing, with full particulars as to denomination, value, weight, and quantity of their goods for statistical purposes, as far as may be considered necessary for completing the manifest. In case of noncompliance, they will be subject to a penalty not exceeding $25.

V.—Coast-trade duty privileges.

Goods arriving from Chinese ports under duty-paid certificate are subject on importation to customs inspection under penalty of loss of coast-trade duty privileges.

VI.—Export manifest and customs supervision.

(*a*) A permit to ship will be issued by the customs for goods to be exported after they have been examined and have paid the tariff duty. No cargo may be taken on board without such customs permit, under penalty of confiscation.

(*b*) Duty-paid export cargo which can not be received on board ought to be reported to the customs before being relanded, in order to secure exemption from export duty when subsequently shipped.

(*c*) When the loading of a vessel is completed, a manifest of her outward cargo must be handed in to the customs by the master or agent. It must contain an exact account of the marks, numbers, contents, etc., of every package on board. For exhibiting a false manifest, the master is liable to a fine not exceeding $10.

(*d*) Goods are not to be transshipped from one vessel to another without customs permit.

(*e*) When a vessel's clearance is applied for, her stamped permits and shipping orders are examined on board; and if they are found in order and the customs are satisfied of the correctness of the manifest and that the whole of the export duties has been paid, the customs clearance is handed to the captain and the vessel is entitled to receive back her papers from the harbor department and to leave the port.

VII.—Hours for loading and unloading vessels.

Vessels wishing to load and unload on Sundays and holidays, as well as between the hours of 6 p. m. and 6 a. m., must take out a special permit from the customs, which permit will be granted free of charge until further notice, if applied for on workdays during office hours.

Mail matter can be shipped and landed at any time without customs permit.

VIII.—Office hours.

The custom-house is open for the receipt and issue of all customs papers from 10 a. m. to 4 p. m. on all days, Sundays and holidays excepted.

IX.—Appeal.

In case of appeal against confiscation imposed by the commissioner of customs, the procedure will be conducted in accordance with the spirit of the "Rules for joint investigation in cases of confiscation and fine, Pekin, May 31, 1868."

X.

Above regulations apply to all merchant vessels and junks and will come into force on the 1st of July, 1899.

TSINTAU, *May 23, 1899.*

The Commissioner of Customs,
OHLMER.

Agreed:
The Imperial Governor,
JAESCHKE.

SPECIAL REGULATIONS FOR THE IMPORTATION AND CONTROL OF OPIUM, ARMS, AND EXPLOSIVES, AND ARTICLES USED IN THE MANUFACTURE THEREOF.

I.—Opium.

(*a*) *Import of opium.*—Opium can only be imported in original chests; the importation of smaller quantities is forbidden. All opium must on arrival be reported without delay to the customs, who will supervise its transportation to the customs godown. The customs officials are entitled to stop all suspicious goods and to search the ship, in which case the captain is to render all possible assistance.

In case of contravention of this regulation, the opium will be confiscated and the ship will be liable to a fine equal to five times the value of the opium, but not under $500.

(*b*) *Consumption of opium.*—Opium for consumption in German territory must be prepared under the supervision of the Government and the customs.

When prepared, the opium is packed in tins containing 10, 20, 30, 40, and 50 grams, and each tin provided with a stamp corresponding to the selling price. It can only be sold by licensed dealers, and a charge will be made for the license.

All opium found in the possession of private individuals contrary to above regulations will be confiscated, and the possessor will be fined five times the value of the opium, but not under $500. In case of nonpayment, imprisonment up to three months will be inflicted.

II.—Arms and explosives, etc.

Arms and explosives, as well as materials used in the manufacture of the same, must at once be declared on arrival and discharged and stored in accordance with harbor regulations. Powder and other explosives, as well as materials used in their manufacture, must be stored in special godowns and can not be delivered without permit from the harbor department. Storage will be charged for.

Arms must be stored in the customs godown and can not be delivered without permit from the harbor department. A charge will be made for storage.

Retail sale of arms and powder will only be permitted to licensed dealers under special conditions as specified on the license itself, and a charge will be made for the license.

Noncompliance with these regulations makes the arms, etc., liable to confiscation and the ship to a fine not exceeding $500. Small vessels found with arms or explosives on board, contrary to these regulations, will be confiscated, and the crew, in case of nonpayment of fine, punished with imprisonment up to three months.

TSINTAU HARBOR REGULATIONS.

(1) The port of Kyao-chau Bay consists of an outer and an inner harbor. The limits of the outer or Tsintau Bay lie between a line drawn from Pile Point to the east point of Clara Bay and a line connecting Cape Evelyn with Junnisan.

The inner harbor begins with the line last mentioned and is limited on the north by a line drawn from Woman's Island to the north point of Huangtao.

The anchorage for different vessels and boats is marked on the harbor map.

(2) Masters of vessels entering the harbor shall, in mooring their ship, act in accordance with instructions received from the harbor captain or his officers.

(3) Masters must report the arrival and departure of their vessel and deposit the ship's register at the harbor office. After receipt of the customs clearance and payment of the harbor fee of 2½ cents for each registered ton, the ship's register will be returned.

Masters of vessels are bound to deliver any mail matter on board to the German post-office; on leaving the port, they are likewise bound to take over and carry with them any mail matter handed to them by the German post-office; they have to undertake the correct delivery of the same at the port of destination. Vessels with mail matter on board, on entering the port, shall notify this by flying the flag T. It is strictly forbidden to accept mail matter, except that given over by the German post-office, or to hand over mail matter to any persons but the German post-office authorities.

(4) Every master of a vessel is required to hand a full account of all goods on board (manifest) to the customs, specifying quantity of goods, numbers, marks, and contents of every package; if called for, fuller particulars must be supplied for statistical purposes.

Opium can only be imported in original chests; the import of lesser quantities than a case is forbidden. On arrival, the opium has to be reported to the customs, which will supervise its transfer to the customs godowns. In default, the opium will be confiscated, and a fine of five times its value will be exacted, but not under $500.

(5) The import of arms, gunpowder, explosive materials, and any other substances used for their manufacturer is under official control. Such goods must be specially reported to the harbor office on arrival.

Vessels arriving with petroleum or explosive cargo on board shall take up such berths as are designed for this purpose on the map, and must remain there until all such cargo has been discharged at a place which will be pointed out by the harbor office. Vessels loading or unloading explosives must fly a red flag at the fore.

Before shipping or discharging any of the above-specified goods in port, a special permission of the harbor office has to be granted; in each case, the instructions received from the harbor office shall be complied with.

(6) Vessels with persons afflicted with a contagious disease on board have to fly a yellow flag at the fore. Before getting a special permission from the harbor department, nobody will be allowed to leave such vessel or to have any intercourse with people on shore.

(7) On entering and leaving the port during daytime, the ship has to hoist the national colors.

(8) No seaman shall be discharged from any ship elsewhere than at the harbor office or the consulate representing the nation of the seaman. Any seaman discharged shall, within twenty-four hours of being discharged, produce at the harbor office the certificate of his discharge.

No master of any ship shall discharge or leave behind any seaman without the sanction of the harbor office or the consulate representing the nation to which the ship belongs. This sanction shall depend on a sufficient security to be given by the master, preventing the seaman becoming destitute within a period of three months.

No seaman shall willfully or negligently remain in the colony.

(9) Seamen deserting may, by order of the harbor office, be apprehended and

returned on board the vessel. Ships and houses may be searched for deserters from ships. A penalty will be inflicted on all persons who knowingly shelter deserters from ships.

(10) In the event of death of a passenger or seaman occurring on board of any vessel in port, the master shall forthwith report the same to the harbor office and subsequently, with exception of Chinese subjects, to the registrar-general.

(11) Disputes between master and crew of vessels the nationality of which is not represented in the colony may be heard and decided at the harbor office. In order to enact its decision, the harbor office may, at its discretion, inflict a fine not exceeding $350 or a penalty for a period not exceeding six weeks.

(12) All vessels lying at anchor in port are required to exhibit a bright light at a visible place from dark until daylight.

In cases of fire or mutiny on board, signals of distress (ringing the bell or hoisting flags) shall be made in order to notify the harbor office.

(13) It is forbidden to throw ballast, ashes, or any rubbish into the waters within harbor limits.

Persons owning or in charge of or keeping anything causing an obstruction in the harbor must remove the same.

If after due notice has been given, such person fails to remove the obstacle, the harbor police shall cause it to be removed and may recover the expenses of removal from the person on whom the notice has been served.

No person, unless legally authorized to do so, may go on board a vessel without permission of the master or the officer in charge.

No junks, lighters, or like vessels are allowed to make fast to a ship without the permission of the master or officer in charge.

(14) No buoy may be laid without the sanction of the harbor office. Buoys that are already laid down are subject to the control of the harbor office, The harbor office, for the sake of safety and the convenience of the port, may shift or remove them at its discretion.

(15) In case of contravention of sections 10 and 14 of the above regulations, a fine not exceeding $25, of sections 21, 3, and 12 a fine not exceeding $100, of sections 5 and 6 a fine not exceeding $2,000 will be inflicted.

In case of contravention of section 8, the master will be subject to a penalty not exceeding $100 and the seamen to a penalty not exceeding $25, or imprisonment for a term not exceeding twenty-five days.

CUSTOMS REGULATIONS AND FEES IN JAPAN.

The Department has received from Minister Buck, under date of Tokyo, July 7, 1899, the following printed copies of the new regulations of the revised customs law and the fees connected therewith:

REGULATIONS FOR EXECUTION OF THE CUSTOMS DUTIES LAW.

[Imperial ordinance No. 319, June 29, 1899.]

CHAPTER I.—ASSESSMENT AND COLLECTION OF, AND SECURING FOR, THE CUSTOMS DUTIES.

ARTICLE 1. A person who desires to enjoy the benefit of special conventions according to the proviso of article 1 of the customs duties law shall produce the proof that the goods he is importing are the produce or manufacture of the locality to which such special conventions are applicable. But postal matter and the goods of which the dutiable amount does not exceed 100 yen are excepted.

ART. 2. The proof mentioned in the preceding article shall require the production of a certificate of the original place of produce or manufacture made by the imperial consulate or commercial agency at the locality of produce, manufacture, or shipment of the goods; but if there is neither imperial consulate nor commercial agency, a certificate document made by the custom-house office or any other government or public authorities or chamber of commerce of the locality.

In the certificate mentioned in the preceding paragraph, there shall be stated the marks, numbers, nature, and quantity of the goods, number of packages, and the place of produce or manufacture.

ART. 3. Collection of the duty shall be notified to the payer by a document indicating the amount of duty and the treasury to which it is payable. But no such notice shall be issued unless it is made payable to a treasury.

ART. 4. The payer, on receipt of the notice mentioned in the preceding article, shall pay the amount of duty to the treasury so indicated.

ART. 5. When a customs official examines and directly collects duties on passengers' baggage, or on the goods mentioned in the proviso of article 24 of the customs duties law, the attendance of other Government or public officers is required.

On collection of duties according to the preceding paragraph, the official shall obtain a certification from the Government or public office on attendance and make report to the custom-house.

ART. 6. When a post-office receives a notice of the amount of duty payable on postal matter according to article 42 of the customs duties law, it shall notify the addresses before it is delivered.

ART. 7. The person so notified, as mentioned in the preceding article, shall affix on the notice revenue stamps equal to the amount of duty and present it to the post-office.

ART. 8. The post-office, on receipt of the document mentioned in the preceding article, shall send it to the custom-house concerned.

ART. 9. A person who desires to claim a reduction of duty according to article 2 of the customs duties law shall present a document to the custom-house stating the marks, numbers, nature, quantity, and original value of the damaged goods, miscellaneous expenses thereof, and the principal reasons for the claim.

ART. 10. The securities to be furnished for payment of duties are limited to money and negotiable public bonds.

ART. 11. The security to be furnished shall be deposited in the treasury, and its receipt shall be presented to the custom-house.

ART. 12. The custom-house may require an additional security to be furnished if the value of the negotiable bonds already furnished becomes depreciated.

ART. 13. When the security is to be sold publicly according to the proviso of article 6 of the customs duties law, the fact shall be advertised, and it shall be sold by auction, after an elapse of at least three days from the first day of advertisement.

ART. 14. In the advertisement shall be mentioned the domicile or residence and name of the furnisher of security, the kinds and value of bonds, the time and place of sale by auction, and other necessary particulars.

ART. 15. The public sale shall not take place in case the amount of duty and expenses have been paid before its execution.

ART. 16. If there is any surplus to be returned to the furnisher of security, according to the proviso of article 6 of the customs duties law, it may be deposited in the treasury.

CHAPTER II.—DETAILS REGARDING VESSELS.

ART. 17. The entrance notice of a vessel shall be given by means of a document stating the name, nationality, and registered tonnage of the vessel, the last port of call, and the number of crew at the time of arrival.

ART. 18. In the vessel's manifest there shall be described the name and nationality of the vessel, the ports of shipment and destinations of cargo, and the latter's marks, numbers, nature, and quantity, number of packages, and the consignees' names. In the manifest to be produced according to article 15 of the customs duties law there shall be stated, besides the particulars mentioned in the preceding paragraph, the ports where the cargo is to be discharged.

ART. 19. The statement of entrance to the hold shall contain the location and number of entrance to the hold; the list of articles for ship's use shall contain the kinds, quantity, and estimated value of the articles for ship's use; and the list of passengers shall contain their names and nationalities and the ports of their embarkation and debarkation.

ART. 20. When it is desired to obtain the permission for a vessel carrying foreign goods for shipping and discharging cargo before the production of manifest, an application in writing shall be made to the custom-house stating the particular reasons for it.

ART. 21. The clearance notice of a vessel shall be given by means of a document stating the name and nationality of the vessel, the port of destination, and the time of departure.

ART. 22. The clearance permission of a vessel engaged in foreign trade shall be given by means of a document, and at the same time the ship's register and other documents shall be returned.

ART. 23. When it is desired to obtain the special permission of the superintendent of customs for a vessel carrying foreign goods for shipping and discharging cargo between sunset and sunrise or on a customs holiday, an application in writing shall be made to the custom-house stating the reasons for it.

ART. 24. The person who has obtained the special permission mentioned in the preceding article shall pay a fee for it; but an exception is made when it is only a matter of the shipping and discharging of domestic goods on a coasting vessel carrying foreign cargo.

ART. 25. When a police officer has received the report mentioned in the second paragraph of article 18 of the customs duties law, he shall immediately inform the custom-house or customs station governing the locality.

ART. 26. When it is desired to transport from an unopened port to an open one any foreign goods mentioned in article 16 of the customs duties law, the master of vessel shall make an application in writing stating the port of discharge, nature of the cargo, and its number and quantity.

ART. 27. When it is desired to land temporarily any foreign goods, the master shall report to the custom-house, or, if there is no custom-house, to customs official or police officer, by means of a document stating the marks, numbers, nature, and quantity of the goods and number of packages. But if unable to report previously on account of shipwreck or other unavoidable cause, he shall do so immediately after they are landed.

ART. 28. The report mentioned in article 21 of the customs duties law shall be made by means of a document stating the nature, quantity, and value of the articles.

ART. 29. When a coasting vessel is compelled to call at a foreign port on account of stress of weather or other unavoidable cause, the master shall report the fact, on return, to the custom-house governing the locality.

If the vessel mentioned in the preceding paragraph had taken on board any article for ship's use at a foreign port, a list containing their nature, quantity, and original value shall be presented to the custom-house governing the locality on return.

CHAPTER III.—DETAILS REGARDING GOODS.

Section I.—General rules.

ART. 30. A person who desires to obtain special permission to send goods to the custom-house or to remove or dispatch them between sunset and sunrise or on a customs holiday shall make an application in writing to custom-house stating the reason.

ART. 31. The person who has obtained the special permission mentioned in the preceding article shall pay a fee for the same.

ART. 32. A person who desires to obtain the special permission to land and ship goods and communicate between a vessel and shore at places other than those appointed for the purpose by the customs, shall make an application in writing to custom-house, stating the places, time, and nature of goods.

If the conditions under which the special permission is granted are disobeyed, the custom-house shall nullify the permission.

ART. 33. The custom-house may grant special permission to examine goods outside of the premises of custom-house or customs branch office. But in the case of the proviso attached to article 24 of the customs duties law no special permission is required.

A person who desires to obtain the special permission mentioned in the preceding paragraph shall make application in writing, stating the place, time, and nature of goods.

A person who has obtained the special permission mentioned in the present article shall pay a fee for the same.

Section II.—Details regarding exportation and reimportation of goods.

ART. 34. Export entry shall be made by means of a document stating the name and nationality of the vessel on which the goods are to be shipped, the marks, numbers, nature, quality, and value of the goods, number of packages, and the port of destination. But for passengers' luggage no document is required.

If the goods to be exported are foreign produce, the place of produce shall be mentioned also.

On the export entry of the goods to be exported for repair and to be reimported, the object of exportation and the place and period of reimportation shall be mentioned also.

If the place of reimportation mentioned in the preceding paragraph is changed, the fact shall be reported in writing to the custom-house at the port of exportation.

ART. 35. A person who desires to export, within full six months from the day of importation, the goods from which the duty was exempted according to article 6 of the customs tariff law, or to export the goods imported in transit, shall produce at the custom-house the import permit or customs certificate having equal validity at the time of making export entry.

On giving permission for the exportation of the goods mentioned in the preceding paragraph, the import permit or certificate shall be returned the holder indorsed "exported."

ART. 36. The provision of the first paragraph of article 34 is applicable to reimport entries.

Section III.—Details regarding importation of goods.

ART. 37. Import entry and list of goods in transit shall contain the statement of the name and nationality of the vessel on which the goods have been carried, the place of their purchase, the place of produce or manufacture, the marks,

numbers, nature, quantity, and original value of the goods, number of packages, and miscellaneous expenses.

ART. 38. Passengers' baggage may be declared verbally.

ART. 39. A person who intends to import the goods to which the provisions of articles 5, 10, and 11 of the customs tariff law are applicable and to claim the exemption of duty shall produce the export permit or customs certificate having the equal validity at the time of making import entry.

ART. 40. A person who intends to import the goods mentioned in article 6 of the customs tariff law shall state in the import entry the object of importation, and the port of the exportation also.

When the port of exportation is changed, the fact shall be reported in writing to the custom-house at the port of importation.

ART. 41. In the import entry of the goods imported for the purpose of transit and the list of goods in transit there shall be stated the object of importation, and the port of exportation also.

ART. 42. A person who desires to obtain the permission to remove goods before the import permit is granted according to the proviso of article 34 of the customs duties law shall make an application in writing to custom-house stating the reasons; and one who desires to obtain the permission to remove in lots the goods stated on an import entry shall give description of the marks, numbers, nature, and quantity of the goods, besides the date of import entry being made.

ART. 43. The invoices of goods shall be returned to the owners at the time the import permit is granted.

ART. 44. A post-office on landing foreign mail shall inform the custom-house interested.

The examination of the mail shall require the attendance of postal officials.

ART. 45. When any mail matter can not be delivered to the addresses, the post-office shall return to the custom-house, stating the reasons thereof, the notices of payment issued according to article 42 of the customs duties law.

Section IV.—Transportation of goods.

ART. 46. Transportation entry of goods is made by means of a document stating the name and nationality of the vessel on which the transportation is to be made, the port of landing, the distinction of domestic from foreign goods, the marks, numbers, nature, quantity, and value of the goods, and number of packages.

ART. 47. On arrival at the port of discharge of the goods in transportation, the transportation permit shall be produced at the custom-house.

The custom-house, on receipt of the permit mentioned in the preceding paragraph, shall examine the goods and, if found to agree with the permit, return the latter to the owner indorsed thereon "transported."

Section V.—Details regarding storage of goods.

ART. 48. In the notice mentioned in article 47 and the application mentioned in article 48 of the customs duties law there shall be described the marks, numbers, and nature of goods and number of packages.

ART. 49. In the notice mentioned in article 51 of the customs duties law there shall be described the particulars mentioned in the preceding article, the reasons for auction, the time and place of auction, and other necessary particulars.

ART. 50. The rates of charges for goods so stored shall be determined by the Minister of Finance.

CHAPTER IV.—PROTESTS.

ART. 51. In a written protest regarding the assessment of duty there shall be stated the causes and reasons for objection and the dates on which the demand was

made and action taken. If there are any documents or articles relating thereto, the fact shall be indorsed thereon.

ART. 52. In a written decision on the protest there shall be stated the domicile or residence and name of the person making the protest, the causes of protest, and ground and principal points of the decision.

ART. 53. The delivery of a written decision shall be made by means of a messenger. But it may be made by way of a registered post.

ART. 54. On delivery of a written decision, a receipt shall be obtained.

ART. 55. When a written decision can not be delivered, owing to uncertainty of domicile or residence of the person making the protest or to any other causes, the principal points of the decision fact shall be notified publicly.

In the case mentioned in the preceding paragraph, the written decision shall be considered as duly delivered after a lapse of seven days, counting from the day of the notification.

ART. 56. When it is intended to purchase goods or cause them to be valued by appraisers according to article 63 of the customs duties law, the person making the protest shall be notified thereof.

ART. 57. The person making the protest, upon receipt of the notice regarding the valuation of goods according to the preceding article, shall select his appraisers and report their occupation, domicile, residence, and names within seven days and obtain the approval of the superintendent of customs. But the period prescribed in the present article may be prolonged on request of the person making the protest, if the superintendent of customs deems it necessary.

ART. 58. When the superintendent of customs considers unsuited the appraisers selected by the person making the protest, he shall order their reselection within another period indicated.

ART. 59. On approval of the appraisers, the superintendent of customs shall appoint the time and place of the valuation of the goods and notify thereof the person making the protest.

ART. 60. On conclusion of the valuation, the appraisers shall draw up a statement giving fully the reasons for their valuation and present it to the customs.

ART. 61. The superintendent of customs, upon conclusion of the valuation, shall notify the person making the protest of the value of goods to be assessed.

CHAPTER V.—INVESTIGATION AND ACTION TAKEN IN CASES OF INFRACTION OF THE LAW.

ART. 62. Any articles seized shall be sealed up by the officials making the seizure.

ART. 63. In the list of articles seized, there shall be stated the names and quantity of the articles, the time and place of seizure, and the domicile or residence and name of the owners of the articles.

ART. 64. When seized articles are placed in custody of the owner or the municipal office of the city, town, or village, a receipt shall be taken therefrom, and if in custody of the municipal office of the city, town, or village, the owner at the time of seizure shall be notified of the fact.

ART. 65. When seized goods are to be disposed of by public sale according to article 90 of the customs duties law, they shall be sold by auction after advertisement.

In the advertisement mentioned in the preceding paragraph, there shall be described the nature and quantity of articles, the reason for sale by auction, the time and place of auction, and other necessary particulars.

ART. 66. In the statements regarding a visit of inspection, search, or interrogation, there shall be described the facts, time, and the particulars of information obtained.

ART. 67. On conclusion of an investigation of infraction of the law, the customs official shall make a report to the superintendent of customs.

ART. 68. The notice to be given for the action taken as mentioned in article 94 of the customs duties law shall be made by the delivery of a note.

In the note there shall, besides the particulars mentioned in article 94 of the customs duties law, be stated the minute facts regarding the infraction of the law, the quantity of articles, and the time and place of payment of money or delivery of articles.

ART. 69. The provisions of articles 53 and 54 shall apply to the delivery of the note of the action taken.

ART. 70. When the articles liable to confiscation are under custody of the municipal office of the city, town, or village, the formality of their delivery shall take place, leaving them in custody of the same.

ART. 71. If there are any seized articles at the time the superintendent of customs institutes proceedings against an infraction of the law, they shall be transferred to the legal court with a list of the seized articles.

If the seized articles mentioned in the preceding paragraph are under custody of the owner or municipal office of city, town, or village, the custodian shall be notified of the fact of transference of the articles.

ART. 72. All the documents concerning the investigation and action taken in cases of infraction of the law shall be sealed across every juncture of pages, and every letter added or erased and every marginal note shall be sealed thereon.

The erasure of letters shall be done so as to leave the letters legible and the total number of the letters shall be indorsed.

CHAPTER VI.—HOURS OPEN FOR THE TRANSACTION OF BUSINESS AT CUSTOM-HOUSE AND SPECIAL OPENING OF THE OFFICES.

ART. 73. The hours open for the transaction of business at custom-house are from 9 a. m. to 4 p. m., exclusive of holidays.

ART. 74. A person who desires to obtain the special permission for opening of the offices, besides the hours open for the transaction of business, shall make an application in writing to the custom-house, stating the hours to be opened and the nature of work to be done during those hours.

The person who has obtained the special permission mentioned in the preceding paragraph shall pay a fee for it.

CHAPTER VII.—MISCELLANEOUS RULES.

ART. 75. A shipmaster who desires to obtain the special permission mentioned in article 98 of the customs duties law shall apply in writing to the superintendent of customs, stating the name of the port, the name and nationality of the vessel, the period of stay and the reasons for the same, and, if it relates to landing of any goods, the nature and quantity of the goods.

Upon obtaining the special permission mentioned in the preceding paragraph, the master shall pay a fee for it into the custom-house.

ART. 76. A person who asks for a certificate of customs or a statistical table regarding ships or merchandise shall pay a fee for each.

ART. 77. The Minister of Finance can levy fees from those who make use of piers, cranes, grounds, buildings, or articles belonging to the customs.

ART. 78. The rates of the fees shall be determined by the Minister of Finance.

ART. 79. The fees may be paid by means of revenue stamps.

The revenue stamps for payment of the fees shall be affixed to the application forms of payment.

ART. 80. The customs and revenue officials are strictly forbidden, either directly

or indirectly, to purchase any articles seized or confiscated, any goods in storage and securities deposited for duties, when they are sold by the officers so authorized.

ART. 81. All documents to be drawn up by the officers authorized, according to the customs duties law or the present regulations, shall be inscribed with the name of the Government establishment or the official titles and names and duly dated and sealed.

ART. 82. All applications and other documents shall be inscribed with the nationality and domicile or residence of the applicant and the date of application, duly signed by the applicant.

ART. 83. All documents to be sent to a custom-house or superintendent of customs shall be presented to the customs branch office, if it happens within the jurisdictions of such a branch office.

Except the preceding paragraph, all provisions regarding the customs are applicable to customs branch office.

SUPPLEMENTARY RULES.

ART. 84. The present regulations shall take effect on the day on which the customs duties law comes into force. But the provisions of articles 1 and 2 shall not take effect until six months shall have elapsed, counting from the day on which the customs duties law comes into force.

ART. 85. The imperial ordinance No. 385 of the thirtieth year of Meiji shall be abolished from the day on which the entire portion of the present regulations shall be enforced.

The imperial ordinance No. 385 relates to the certification of original places of produce or manufacture of imported goods to enable them to enjoy the benefit of the conventional tariff.

NEW CUSTOMS FEES.

By ordinance No. 34 of the treasury department, a new schedule of customs fees has been announced to be enforced on and after August 4 of this year.

	Yen.	
Fees for over-time service on ordinary days:		
From 4 p. m. to 6 p. m.	30	=$14.94
From 4 p. m. to 12 p. m.	90	= 44.82
From 4 p. m. to past 12 p. m.	190	= 94.62
From dawn to 10 a. m.	40	= 19.92
(Special arrangement for cases of service to be continued over night.)		
Fees for special service on holidays and Sundays:		
From 10 a. m. to 4 p. m.	50	= 24.90
From 10 a. m. to 6 p. m.	80	= 39.84
From 10 a. m. to 12 p. m.	140	= 69.72
From 10 a. m. to past 12 p. m.	240	=119.52
From dawn to 10 a. m.	40	= 19.92
(Special arrangement for cases of service to be continued over night.)		
Fees for over-time service on ordinary days and special services on holidays and Sundays at customs branch offices:		
From dawn to sunset.....per hour or fraction...	2	= .99
From sunset to dawn.....do.....	3	= 1.49
Fees for lading, unlading, delivery, acceptance, or forwarding on ordinary days:		
From sunset to dawn.....per hour or fraction...	3	= 1.49

	Yen.		
Fees for lading, unlading, delivery, acceptance, or forwarding on customs holidays and Sundays:			
From dawn to sunset.....per hour or fraction...	2	=	$0.99
From sunset to dawn.....do.....	3	=	1.49
Fees for lading, unlading, delivery, acceptance, or forwarding on ordinary days at customs branch offices:			
From sunset to dawn.....per hour or fraction...	1½	=	.74
Fees for lading, unlading, delivery, acceptance, or forwarding on holidays and Sundays at the same:			
From dawn to sunset.....per hour or fraction...	1	=	.49
From sunset to dawn.....do.....	1½	=	.74
Fees for inspection outside the compounds of customs or customs branch offices:			
Per hour or fraction.....	3	=	1.49
(When traveling expense is involved the same shall be borne by the applicant.)			
Fees for permission to visit a noncustoms port:			
Per visit.....	10	=	4.98
Fees mentioned in article 76 of the customs tariff operation rules:			
(1) Certificate .....per case...	2	=	.99
(2) Daily export and import returns.....per month...	20	=	9.96
(3) Other returns relating to ships and goods.....per case...	0½	=	.24

Article 76 of the operation rules states: "Those who wish to obtain from customs a certificate or returns pertaining to ships or goods must pay fees."

OPERATION OF JAPANESE TREATIES.

Minister Buck transmits from Tokyo, July 7, 1899, the following printed copy of an imperial rescript and department instructions relating to the operation of the new treaties:

IMPERIAL RESCRIPT ON THE NEW TREATIES.

Governing our Realm by the abiding aid of our ancestors' achievements, which have enabled us to secure the prosperity of our people at home and to establish relations of close amity with the nations abroad, it is a source of heartfelt gratification to us that, in the sequel of exhaustive planning and repeated negotiations, an agreement has been come to with the powers, and the revision of the treaties, our long cherished aim, is to-day on the eve of becoming an accomplished fact; a result which, while it adds materially to the responsibilities of our Empire, will greatly strengthen the basis of our friendship with foreign countries.

It is our earnest wish that our subjects, whose devoted loyalty in the discharge of their duties is conspicuous, should enter earnestly into our sentiments in this matter, and, in compliance with the great policy of opening the country, should all unite with one heart to associate cordially with the peoples from afar, thus maintaining the character of the nation and enhancing the prestige of the Empire.

In view of the responsibilities that devolve upon us in giving effect to the new treaties, it is our will that our ministers of state, acting on our behalf, should instruct our officials of all classes to observe the utmost circumspection in the management of affairs, to the end that subjects and strangers alike may enjoy equal

privileges and advantages, and that, every source of dissatisfaction being avoided, relations of peace and amity with all nations may be strengthened and consolidated in perpetuity.

JUNE *30, 1899.*

CABINET NOTIFICATION NO. I.

The work of revising the treaties has caused deep solicitude to His August Majesty since the centralization of the Government, and has long been an object of earnest desire to the people. More than twenty years have elapsed since the question was opened by the dispatch of a special embassy to the West in 1871. Throughout the whole of that interval, numerous negotiations were conducted with foreign countries and numerous plans discussed, until finally, in 1884, Great Britain took the lead in concluding a revised treaty, and the other powers all followed in succession, so that now the operation of the new treaties is about to take place on the 17th of July and the 4th of August.

The revision of the treaties in the sense of placing on a footing of equality the intercourse of this country with foreign states was the basis of the great liberal policy adopted at the time of the restoration, and that such a course conduces to enhance the prestige of the Empire and to promote the prosperity of the people is a proposition not requiring demonstration. But if there should be anything defective in the methods adopted for giving effect to the treaties, not merely will the object of revision be sacrificed, but also the country's relations with friendly powers will be impaired and its prestige may be lowered. It is, of course, beyond question that any rights and privileges accruing to us as a result of treaty revision should be duly asserted. But there devolves upon the Government of this Empire the responsibility, and upon the people of this Realm the duty, of protecting the rights and privileges of foreigners, and of sparing no effort that they may one and all be enabled to reside in the country confidently and contentedly. It behooves all officials to clearly apprehend the august intentions and to pay profound attention to these points.

Marquis YAMAGATA,

JULY *1, 1899.* *Minister President of State.*

GENERAL INSTRUCTION NO. 10 OF THE MINISTER OF STATE FOR EDUCATION TO LOCAL GOVERNORS.

Since my assumption of office the condition of the schools has caused me much solicitude, and on the occasion of the assembling of the governors of prefectures and cities last April, I urged them to give serious consideration to the question of correcting the conduct of students and making the school regulations more stringent. The time for the operation of the revised treaties is now only a few days distant, and His Majesty has graciously issued an imperial edict on the subject. Doubtless the number of foreigners visiting the interior of the country will greatly increase, and if at such a time students be left without proper control, and suffered to neglect the dictates of propriety by cherishing sentiments of petty arrogance and behaving in a violent, outrageous, or vulgar manner, not only will the educational system be brought into discredit, but also the prestige of the country will be impaired and its reputation may even be destroyed. It is desired, therefore, that, in respectful accord with the august will, the directors of schools and the teachers should exert themselves to the utmost to effect reforms and to discharge their functions with such earnestness that educational methods may be freed from all errors.

Count KABAYAMA,

JULY *1, 1899.* *Minister of State for Education.*

SPECIAL INSTRUCTION NO. 11 OF THE MINISTER OF STATE FOR EDUCATION TO GOVERNMENT SCHOOLS.

The schools under the direct control of the Government serve as models to all the public and private educational institutions throughout the country. It is therefore my earnest desire that the behavior of the students at such schools should be regulated with notably strict regard to the canons of propriety, so that they may show themselves worthy of the station they occupy. The date of the operation of the revised treaties is now imminent, and His Imperial Majesty has issued a gracious rescript. It may be expected that the coming and going of foreigners in the interior of the country will henceforth grow more frequent, and if at such a time students be left without proper control, and suffered to neglect the dictates of propriety by cherishing sentiments of petty arrogance and behaving in a violent, outrageous, or vulgar manner, not only will the educational systems be brought into discredit, but also the prestige of the country will be impaired and its reputation may even be destroyed. For that reason I have addressed an instruction to the local governors urging them to guard against any defects in educational methods, and I am now constrained to appeal to the Government schools which serve for models. I trust that those upon whom the functions of direction and teaching devolve, paying respectful attention to the august intention, will discharge their duties carefully towards the students, and, by securing the latter's strict adherence to rules, will contrive that they shall serve as a worthy example to the schools throughout the country.

Count KABAYAMA,
Minister of State for Education.

JULY 1, *1899.*

Under date of July 11, Mr. Buck sends copy of a notification issued by him and printed in several newspapers of the country, as follows:

NOTIFICATION TO UNITED STATES CITIZENS IN JAPAN.

In view of the coming into operation of the new treaty between the United States and Japan on the 17th day of the present month, it seems fitting and proper, not only to announce to citizens of the United States in Japan that fact, but also to call their attention to the changed conditions and to the obligations that will rest upon them in their new relations to Japanese laws and regulations to which they will be amenable equally with Japanese subjects in all that relates to their individual rights and privileges.

On the 16th instant jurisdiction of United States consular courts in Japan will end and "all the exceptional privileges, exemptions, and immunities now enjoyed by citizens of the United States as a part of, or appurtenant to, such jurisdiction" will "absolutely cease and determine and thereafter all such jurisdiction will be assumed and exercised by Japanese courts."

The rescript of His Imperial Majesty the Emperor, as also the several notifications by His Excellency the Minister President of State, and their excellencies the heads of departments of the Government, already published, enjoining, as they do, upon all Japanese subjects their duties in respect to foreigners, have been read with much satisfaction by me as they will be by all United States citizens, not only in Japan, but in America as well. In like spirit attention is called to the duty which, I trust, will be the pleasure of all citizens of the United States under no circumstances to give any cause of complaint either to Government officials or other Japanese subjects. In their relations with the people of this country they should at all times, by their demeanor and by their every act, show such sentiments of regard for those with whom they will necessarily be associated and for all laws, regulations, and

customs, as will demonstrate that reciprocal friendship reasonably expected of them in response to the kind, considerate, and just treatment enjoined on all Japanese subjects by His Imperial Majesty and by the high officials of the Government.

The United States was the first of all the powers to enter into a "treaty of peace, amity, and commerce" with Japan. From that time the bonds of friendship uniting the two countries have become stronger and stronger with passing years, and it is the duty of all citizens of the United States in this country to see to it that nothing on their part is done to cause reflection upon the people of their nationality.

Given under my hand and seal this 10th day of July, 1899.

ALFRED E. BUCK,
United States Minister.

On July 12, Minister Buck informs the Department that the notification has been generally published by the Japanese papers, with very gratifying comments.

FOREIGN COMPANIES IN JAPAN.

Copies of ordinances recently published in Japan have been forwarded by Minister Buck, of Tokyo, under date of June 20, 1899. They read as follows:

IMPORTANT ORDINANCES FOR FOREIGNERS.

[Translated by Dr. I. Loenholm.]

I.

Imperial ordinance No. 272, of June 15, 1899, relating to branch offices of foreign commercial companies, and to commercial companies and associations established by foreigners.

ARTICLE 1. A foreign commercial company* which has set up a branch office in Japan before the commercial code takes effect must, within six months from its taking effect, register such fact according to the provisions of article 255 of the commercial code and appoint a representative in Japan and register his name and domicile.

The provisions of article 257 of the commercial code and of article 202 of the law concerning matters not in contention apply correspondingly to such foreign companies.

ART. 2. A commercial company formed by foreigners in Japan before the commercial code takes effect must, within six months from its taking effect, make a company contract in accordance with the provisions of the commercial code and register the formation of the company.

ART. 3. If a commercial company act in contravention of the provisions of article 2, the court may, on the application of the public procurator or of its own motion, order the dissolution of the company.

The order of dissolution must be published in the same manner as registered facts are published.

ART. 4. As to commercial companies formed by foreigners in Japan before the commercial code takes effect, the legal relations which will arise before the regis-

* Kwaisha, including partnerships.

tration is made according to the provisions of article 2, or before an order of dissolution has become finally binding, are governed by the law of the country to which the company belonged.

ART. 5. An association formed by foreigners in Japan before the commercial code takes effect, which has property of its own, must, within six months from the date of the commercial code, change its organization into that of some kind of commercial company recognized by the commercial code. The provisions of the preceding two articles apply correspondingly to such an association.

II.

Imperial ordinance No. 273, of June 15, 1899, concerning foreign insurance companies.

ARTICLE 1. If a foreign commercial company establishes an agency* in Japan to carry on the business of insurance, it must appoint a representative in Japan. The provisions of article 62 of the commercial code apply correspondingly to such representative.

ART. 2. The foreign company must notify the Government of the name and domicile of its representative in Japan.

ART. 3. The provisions of articles 95 and 97–101 of the law concerning the operation of the commercial code apply correspondingly to foreign insurance companies.

ART. 4. If it appears to the Government that the continuance of the business of a foreign insurance company is endangered, or if the foreign company acts in contravention of an order of the Government, the Government may order that the prosecution of the business be suspended or the representative be removed.

ART. 5. Whenever a foreign insurance company makes an inventory and a balance sheet, it must without delay submit it to the Government, together with a business report, an account of profits and losses, and a statement as to the distribution of the profits.

ART. 6. A foreign insurance company which has set up a branch office or an agency in Japan before the taking effect of the commercial code must, within six months from its taking effect, obtain permission of the Government.

The provisions of article 95, 2, of the law concerning the operation of the commercial code apply correspondingly to such foreign companies.

ART. 7. The provisions of articles 1, 2, 4, and 5 of this law and of articles 98–101 of the law concerning the operation of the commercial code apply correspondingly to foreign insurance companies which have established a branch office or an agency in Japan before the commercial code takes effect.

JAPANESE REGULATIONS RELATING TO FOREIGNERS.

Minister Buck, of Tokyo, under date of July 12, 1899, sends clippings from local papers giving translations of regulations recently issued which are of interest to foreigners. The regulations read:

WEIGHTS AND MEASURES.

The following instruction has been issued by the Minister of Agriculture and Commerce:

In the case of scales, measures, or weighing machines hitherto made, repaired, or sold by foreigners or hitherto used for business purposes in the settlement and

* **Kumiai.** This means associations for business purposes only; not clubs, etc.

requiring to be examined by the authorities in accordance with the provisions of the scale, measures, and weighing machines regulations issued in 1891 as law No. 3, inspection of their construction for the second examination may be postponed till the end of December, 1899.

July 8, 1899.

SONE ARASUKE,
Minister of Agriculture and Commerce.

RESIDENTIAL REPORTS.

The following regulations have been issued over the joint signatures of the Ministers of Home Affairs and of Justice:

ARTICLE I. The proprietor of a hotel or a person carrying on business of that kind and who allows others to lodge in his house is required, in accordance with the regulations issued by the local authorities, to report to the police such matters as are prescribed in the regulations.

Except in cases specified by the regulations, the above-mentioned report may be forwarded to the police either at a police box, a station, or on beat.

ART. II. Persons staying in a hotel or other house shall inform the proprietor or the manager of the house of the particulars to be reported to the police in accordance with Article I of these regulations, or he shall fill up the blank himself in the form handed to him by the proprietor or the manager of the house.

ART. III. A foreigner residing in a village, town, or city for more than ninety days, whether or not he keeps a house for himself, shall report, within ten days from the day of his arrival, to the police office with jurisdiction over that district his own address, nationality, age, and occupation, as well as those of all members of his family, in addition to the date of their arrival, former addresses, respective addresses in their home countries, and also the relations existing between the several members.

In cases other than those mentioned in the foregoing paragraph, foreigners residing in the same village, town, or city over ninety days are required to report the particulars specified above within ten days from the expiry of the ninety days.

When a foreigner does not keep a house for himself, the person who allows him to lodge in his house or who has leased a house to him or his agent shall also sign his name in the report to be forwarded by the foreigner.

A person who has lost Japanese nationality and still continues residing in the same place is not required to forward a report as mentioned in this article.

ART. IV. In case a foreigner registered in the registration book mentioned in Article VII removes to another place, a report stating the date of his removal and his new address shall be forwarded to the police to which jurisdiction the place belongs within ten days from the date of his removal by the undermentioned persons; provided that if the report be personally forwarded by the person removing to another place in accordance with clause 4, such report shall be forwarded to the police before his removal:

(1) By the person who has allowed foreigners to stay at his house, when such foreigners remove to another place.

(2) By the head of a family when the latter belongs to a foreigner keeping his own house and who has removed to another house.

(3) When a foreigner keeping his own house has removed to another place, leaving his family at the former house, the report shall be forwarded by a person who has attained his majority, among the members of the family, or by the oldest members of the family in case the head of the family has not attained his majority.

(4) When a foreigner keeping his own house removes to another place with his family, the report shall be forwarded by the foreigner himself.

In cases other than those stated in the foregoing clauses, the report shall be forwarded by the owner of the house or the person under whose management the house remains.

ART. V. A foreigner registered in the registration book mentioned in Article VII is required to report to the police of the district in which he resides any change in the names and nationality of himself or the members of his family within ten days from such change.

ART. VI. When the title owned by a foreigner is registered by the registrar, the latter shall report the fact to the police within whose jurisdiction his residence is situated.

It is necessary for the registrar to mention the foreigner's address in his report.

ART. VII. A registration book shall be provided at police stations in order to register therein matters reported in accordance with Article VI, concerning foreigners specified in clauses 1, 2, and 4 of Article III, as well reports forwarded in accordance with clauses 1 and 2 of Article III and Articles IV and V. This is applicable to cases when, though no report or information has been given to the police, the facts which are required to be registered come to the knowledge of the police through the proceedings mentioned in Article IX of these regulations.

ART. VIII. Any person may ask the police for permission to inspect the registration book mentioned in Article VII, or for a duplicate or copy of the registration.

Persons wishing to inspect the registration book shall pay a fee of 10 sen and another 10 sen per page or less for a duplicate or copy of the registration, provided the calculation of pages shall be made according to the originals.

The fees mentioned in the preceding clause shall be paid in revenue stamps pasted on the application.

ART. IX. Everybody is required to answer questions put by police officials concerning matters which must be reported in accordance with Article I and matters to be registered in the registration book mentioned in Article VII, and also concerning the keeper of a house, his family, and his lodgers.

Foreigners carrying passports or other certificates to prove their nationality shall show the same to police officials if required.

ART. X. Any person refusing to answer the questions put by police officials, or who refuses the request of police officials contrary to what is required in Article IX, shall be sentenced to pay a fine of not more than 20 yen, except in cases to which the penal code is applicable.

ART. XI. Persons who neglect to forward the reports mentioned in Article I, clauses 1 and 2 of Article III, and Articles IV and V shall be sentenced to pay a fine of not more than 1.25 yen, and persons making false statements in such reports shall be ordered to pay a fine of not more than 20 yen, except in cases to which the penal code is applicable.

Persons infringing the provisions of Article II and clause 3 of Article III shall be sentenced to pay a fine of not more than 1.25 yen.

ART. XII. The number of days allowed for forwarding reports required in clause 1 and 2 of Article III concerning foreigners residing within Japanese territory on the day on which these regulations come into operation shall be calculated from the date of operation of these regulations.

ART. XIII. These regulations shall be put into operation on and after July 17, 1899.

DECEASED FOREIGNERS' PROPERTY.

By ordinance No. 40 of the Department of Justice the regulations for the safekeeping of foreigners' property in accordance with clause 2, article 209 of the law of noncontentious cases, have been enacted as follows:

ARTICLE I. The local office which, in accordance with the provisions of the treaty,

is entitled to issue notice of the death of a foreigner or to receive such notice or to interfere in the safe-keeping of a deceased foreigner's property shall be the local court with jurisdiction over the district in which his death has taken place.

In case a foreigner has died at a place outside Japanese territory, the local office mentioned above shall be the local court with jurisdiction over the district in which his property is situated.

ART. II. Procedure relating to the safe-keeping of a demised foreigner's property may be intrusted to others.

ART. III. When the fact of a foreigner's death comes to the knowledge of a police official, he shall at once report at the local court mentioned in clause 1, Article I, the nationality, abode or domicile, name, age of the deceased, and place and date at which the death has occurred.

The registrar shall at once forward a copy of registration to the above-mentioned local court when he has registered the death of a foreigner.

ART. IV. In case a local office in accordance with the provisions of the treaty participates in the sealing or unsealing of a deceased foreigner's property, a judge and a clerk of the local court concerned shall attend on behalf of the court. A public procurator of the court may also attend.

ART. V. In case a local office has to compile, in accordance with the provisions of the treaty, an inventory of a deceased foreigner's property to the consul concerned, the local court shall, in compliance with the request of persons interested or of a public procurator, appoint an administrator, causing the latter to submit a copy of the inventory, and shall forward the latter with other documents to the consul.

ART. VI. The local court shall notify the consul concerned when a public notification concerning a deceased foreigner's property mentioned in articles 69 and 70 of the law of noncontentious cases or of article 1057 of the civil code is published.

ART. VII. The present ordinance shall take effect from the 17th of the seventh month of the thirty-second year of Meiji (July 17, 1899).

TONNAGE DUES LAW IN JAPAN.

Minister Buck transmits from Tokyo, June 30, 1899, translation of regulations for the operation of the tonnage dues law, as follows:

REGULATIONS FOR THE OPERATION OF THE TONNAGE DUES LAW.

ARTICLE I. Persons wishing to pay the tonnage dues for one year at one time, according to the provisions of the note appended to Article I of the tonnage dues law, shall give notice of their intention to the custom-house or a branch office of the same.

ART. II. When the custom-house or a branch office desires to collect tonnage dues, notice shall be given to the payer of the amount of dues and the place of payment.

ART. III. Vessels engaged in foreign trade which enter port on account of calamities at sea or other unavoidable reason should certify to the circumstances at the custom-house or branch office.

In case the tonnage dues are paid, the above is not required.

ART. IV. Persons who desire to receive a certificate of the payment of tonnage dues, or a certificate of the measurement of their vessel, in case such vessel has been measured in accordance with Article IV of the tonnage law, should apply to the custom-house or branch office and pay a fee of 1.50 yen (74 cents) for each certificate.

The above fee may be paid in revenue stamps, attached to the application for certificate.

ART. V. With regard to the method of investigation and punishment of violations of these regulations, the regulations for the operation of the custom-house law shall be applied.

Appendix.

This ordinance shall go into effect on the date of the operation of the tonnage dues law (August 4, 1899).

JAPANESE DIPLOMATIC AND CONSULAR OFFICERS.

The Department has received from Minister Buck, of Tokyo, under date of June 23, 1899, translations of revised regulations for diplomatic and consular officers of that Government, as follows:

IMPERIAL ORDINANCE NO. 280.—OFFICIAL REGULATIONS FOR DIPLOMATIC OFFICIALS AND CONSULS.

ARTICLE I. Diplomatic officials here referred to include ministers plenipotentiary, ministers resident, first-class secretaries of legation, second-class secretaries of legation, third-class secretaries of legation, and assistant diplomatic officials.

ART. II. Ministers plenipotentiary and ministers resident belong to the chokunin* rank; first, second, and third class secretaries of legation and assistant diplomatic officials belong to the sonin† rank.

ART. III. Consuls here referred to include consuls-general, consuls, vice-consuls, and assistant consuls.

ART. IV. Consuls-general, consuls, vice-consuls, and assistant consuls belong to the sonin rank.

ART. V. In places where no diplomatic official is located, diplomatic agents can be appointed.

The business of diplomatic agents is to be conducted by a consul.

ART. VI. In places where no consul is located, a commissioner of trade, an honorary consul, or an honorary vice-consul can be appointed.

Commissioners of trade belong to the sonin rank, and the other two officials are to be treated as sonin officials.

ART. VII. Diplomatic clerks (élèves) are to be attached to legations, consulates, and commercial agencies. Diplomatic clerks belong to the hannin‡ rank.

ART. VIII. At legations where there is a necessity of interpreting foreign languages other than English, French, and German, first-class and second-class interpreters can be appointed. These two officials belong to the sonin rank.

ART. IX. At legations, consulates, and commercial agencies where there is a necessity of interpreting foreign languages other than English, French, and German, student interpreters (élèves) for foreign affairs can be appointed. These student interpreters belong to the hannin rank.

ART. X. Those diplomatic officials and consuls who are for a time relieved from duty abroad, or those officials of the Foreign Office who, being appointed diplomatic officials or consuls, are not yet assigned to any post, are said to be in taimei.§

*Appointed by the Emperor.
† Appointed by the cabinet.
‡ Appointed by heads of departments.
§ Waiting for appointment.

Diplomatic officials and consuls in taimei, though they retain their office, do not perform their duties. They are the same as officials actually holding office, except in the points which are specially enacted in this ordinance, and in regard to the law of the expenses for the legation and the consulate. The diplomatic officials and the consuls in taimei can be employed temporarily to perform duty at the Foreign Office. In this case, the legal enactment concerning officials actually holding office shall be applied to them.

Taimei terminates in three full years. When that term has expired, those officials still in taimei are to be relieved of their posts.

The diplomatic officials and the consuls in taimei can not be suspended from office.

The foregoing paragraphs are applicable to commissioners of trade, first-class and second-class interpreters of legation.

Appended rules.

ART. XI. Imperial ordinance No. 82, issued in the twenty-eighth year of Meiji (1895), and imperial ordinance No. 87, issued in the same year, are to be annulled on and after the day when this ordinance comes into force.

ART. XII. Those who hold the position of first and second class consuls when this ordinance comes into force are appointed consuls, if they do not receive official notice to the contrary.

IMPERIAL ORDINANCE NO. 281.—THE FIXED NUMBER OF OFFICIALS BELONGING TO THE GOVERNMENT OFFICES IN FOREIGN COUNTRIES.

ARTICLE I. The fixed number of diplomatic officials, consuls, commissioners of trade, first and second class interpreters of legation, diplomatic clerks (élèves), and student interpreters (élèves) for foreign affairs is as follows:

Ministers plenipotentiary and ministers resident	15
First, second, and third class secretaries of legation	28
Consuls-general, consuls, vice-consuls, and commissioners of trade	34
First and second class interpreters of legation	7
Assistant diplomatic officials and assistant consuls	29
Diplomatic clerks (élèves) and student interpreters (élèves) for foreign affairs	123

If a diplomatic official adds to his own office that of a consul, or vice versa, the addition is not counted in the fixed number.

ART. II. The fixed number of the diplomatic officials, consuls, commissioners of trade, and first and second class interpreters in taimei is 15, outside of the number stated in the foregoing article.

IMPERIAL ORDINANCE NO. 282.—THE GRADE OF THE OFFICIALS BELONGING TO THE GOVERNMENT OFFICES IN FOREIGN COUNTRIES.

ARTICLE I. The grade of the officials belonging to the Government offices in foreign countries is as follows:

First-class higher official: Ministers plenipotentiary.

Second-class higher official: Ministers plenipotentiary, ministers resident.

Third-class higher official: First-class secretaries of legation, consuls-general.

Fourth-class higher official: First-class secretaries of legation, consuls-general, second-class secretaries of legation, consuls, commissioners of trade.

Fifth-class higher official: Second-class secretaries of legation, consuls, commissioners of trade.

Sixth-class higher official: Third-class secretaries of legation, consuls, commissioners of trade, first-class interpreters of legation.

Seventh-class higher official: Third-class secretaries of legation, consuls, commissioners of trade, vice-consuls, second-class interpreters of legation, assistant diplomatic officials, assistant consuls.

Consuls-general who have held the third grade of the higher official (kotokwan) for more than three years, and have rendered special service to the Government, can be ranked in the second class of the higher official.

ART. II. Official positions that are not fixed in this ordinance shall be determined according to the law governing the salaries of the different grades of higher officials.

Appended rules.

ART III. Imperial ordinance No. 170, issued in the twenty-sixth year of Meiji (1893), is to be annulled when this ordinance comes into force.

ART. IV. Those who do not receive any official notice to the contrary, when this ordinance comes into force, are appointed to the grade corresponding to the present grade of their office.

NOTE.

The law of expenses of legations and consulates is amended to conform with the above regulations.

TRADE ON THE WEST RIVER OF CHINA.

The most important inland feeder of Hongkong is the West River country, which drains the provinces of Kwangsi and Yunnan. Since the beginning of last year, this section has increased very much in importance, and is rapidly developing, now that it has been opened to foreign trade. Prospectors have been through the country, and their reports of the mineral wealth of the section are surprising. At present, the district is open to trade only. Foreigners are not allowed to hold property in their own names. Wuchow, at the head of navigation, 220 miles from Hongkong, is the most important port of transshipment. The port was opened on the 4th of June, 1897, so that its commercial history has been necessarily very brief. I inclose a very instructive editorial from the Daily Press of June 2, which may be of interest to American firms doing business with this part of China.

ROUNSEVELLE WILDMAN,
Consul-General.

HONGKONG, *June 3, 1899.*

The customs returns for the January-March quarter show that the trade of Hongkong's more immediate commercial dependencies is in a fairly prosperous condition and that the West River trade in particular gives promise of fulfilling the expectations of the most sanguine advocates of the opening of that route. The import duty collected on general cargo during the quarter at Canton, Kowloon, Lappa, and the West River ports was 182,000 taels ($130,000), an increase of 8,000 taels as compared with the same period of 1898, and of 41,000 taels over 1897. The total collection, including opium duty and likin, export duty, and the local taxes for the same quarter, was 602,000 taels ($434,000), or 35,000 taels more than in 1898.

These figures, while moderately satisfactory in themselves, are still more so

when they are regarded as an indication of the possibilities of expansion under improved conditions. The West River can never hope to rival the Yangtze in respect of the volume of trade carried upon it, but the traffic will in the future attain dimensions beside which the present figures will appear small. The provinces of Kwansi and Yunnan have not yet recovered from the ravages of the Taiping and Mohammedan rebellions, and what movement there has been in the direction of recovery has been retarded by misgovernment, a dishonest fiscal system, piracy, and brigandage. The process of recovery will be stimulated by the safe and free navigation of the water ways of the provinces—by steam, where steam navigation is possible, but, whether by steam or by junk, with reasonable security against outrage and robbery, and by freeing the trade from all illegal exactions. The right to navigate the inland waters has already been secured (though defective regulations have as yet prevented the realization of this advantage), and the opening of Wuchow and enforcement of the transit-pass system have in part systematized the taxation of trade and diminished the opportunities for illegal exaction.

But trade on the river is still exposed to the risk of piracy, which the Chinese authorities appear unable to suppress. The torpedo boats which were told off some time ago for this purpose are said to be engaged in turning an honest penny by towing, to the neglect of their proper work, which receives no attention. If piracy is to be suppressed, it would seem that it will have to be by British gunboats. The modus operandi of the river pirates is almost invariably the same. They go on board the vessel they have selected for robbery as ordinary passengers, and, on reaching a given spot, where confederates are in waiting with boats, they rise, overawe the passengers and crew, secure their plunder, and make good their escape. Under this system, the chance of their being caught in flagrante delicto by any gunboat, either Chinese or foreign, is remote, and if they are to be effectually suppressed it must be by tracking them to their lairs and dealing with them there. It is well known that certain villages and towns are the headquarters of piratical gangs, and when a piracy has been committed and the pirates are traced to one of these places it would seem to be only common sense and justice that the town or village should be required to deliver up the delinquents and be held liable to severe penalties if it failed to do so.

CHEFOO TRADE IN 1898.

The annual report of trade for the port of Chefoo for the calendar year 1898 by the commissioner of customs has just been received. At this time I propose to comment upon the most important points, reserving the details for my annual report.

TRADE WITH UNITED STATES.

In the review of my annual report published in CONSULAR REPORTS No. 221 (February, 1899), page 286, I said:

> Dry statistical tables are not, as a rule, considered interesting reading; but one must feel a little pride to see the increase in imports of all American goods.

I then submitted a table to show that the gain is not abnormal, and continued:

> This table not only proves that imports of American merchandise are increasing on a sound basis, but that the year 1897 shows phenomenal strides.

The following is a similar table, with the figures for the calendar year 1898:

Imports of merchandise especially termed American for the years 1893–1898.

Year.	Drills.	Jeans.	Sheetings.	Flour.	Kerosene oil.
	Pieces.	*Pieces.*	*Pieces.*		*Gallons.*
1893	37,679	900	85,055	$1,570.76	2,253,870
1894	45,025	1,220	108,647	8,186.62	1,833,790
1895	59,515	2,250	154,540	23,130.22	1,967,900
1896	106,326	2,500	217,560	7,706.12	2,388,250
1897	142,955	4,260	336,741	7,197.58	5,281,060
1898	163,547	7,980	543,470	75,810.92	4,500,060

The only break in the constant increase of our trade is in kerosene oil. While disappointed to see that the importations of that commodity show a decline of 781,000 gallons, I am not surprised, for it justifies my statements made in my report in CONSULAR REPORTS No. 223 (April, 1899), page 545. While American oil fell off from the importation of 1897, it is almost double that of any preceding year. Russian oil shows a decline from 577,800 gallons in 1897 to 109,940 gallons in 1898, while there was a net importation of 142,000 gallons of Sumatran, that oil appearing for the first time in the returns.

The value of the net total of foreign imports into Chefoo in 1898 was 14,542,823 haikwan taels ($10,179,976), against 11,066,410 haikwan taels ($7,746,487) in 1897, an increase of nearly 3,500,000 haikwan taels.

The total collection of revenue amounted to 566,502 haikwan taels ($396,551), an increase of 105,573 haikwan taels ($73,901) over 1897, the largest on record.

The net value of the foreign imports into Chefoo for the calendar year 1898 was 14,542,823 haikwan taels ($10,179,976), while the value of those goods specifically classed as American was as follows:

Articles.	Value.	
	Hk. taels.	
Drills	583,106	$408,174
Jeans	22,631	15,842
Sheetings	1,947,348	1,363,144
Flour	109,229	75,805
Ginseng *	124	87
Oil, kerosene	601,399	420,979
Direct imports not included in above list †	23,679	16,575
Total	3,287,516	2,301,261

* For six months ended June 30; not specified in annual return.

† This is arrived at by deducting the value of kerosene oil imported direct, valued at 101,355 haikwan taels, from total direct imports.

Although the value of the importations of oil decreased from $547,072 in 1897 to $420,797 in 1898, a loss of $126,275, nevertheless the totals of these specified classes show a gain over the values for 1897 of $199,852. It is fairer, however, to judge trade by the customs tael. In 1898, the value was 3,287,516 haikwan taels; in 1897, 2,813,086 haikwan taels; gain in 1898 over 1897, 474,430 haikwan taels. While this is a most creditable showing, it could have been vastly improved, for there is no reason why we should lose ground in the sale of kerosene oil in Chefoo.

TRADE WITH JAPAN.

The most remarkable aspect of the Chefoo trade is shown by the strides that Japan has made, as will be seen by the subjoined table.

Imports (net) into Chefoo for the calendar year 1898 specified as Japanese.

Articles.	Quantity.	Value.
		Hk. taels.
T cloths.....pieces	21,356	41,484
Sheetings.....do	1,760	5,572
Handkerchiefs.....dozen	3,986	1,973
Towels.....do	5,813	3,028
Cotton cloth.....pieces	4,974	5,568
Cotton crape.....do	3,917	5,170
Cotton yarn.....pounds	24,312,433	4,406,738
Copper slabs.....do	650,666	10,295
Camphor.....do	5,400	1,455
Arrowroot.....do	280,800	4,512
Matches.....gross	1,355,838	265,878
Silk and cotton mixtures.....pounds	9,066	12,559
Umbrellas.....pieces	10,777	13,765
Total.....		*4,778,006

*Value in United States gold, $3,344,604.

Japan thus sold considerably more than one-third of the entire foreign imports, and over $1,000,000 gold more than we did. Here is food for thought, for in many lines Japan competes not only with us, but with Great Britain and Europe as well; and the above list, as in our own case, by no means includes all the imports from Japan.

JAPANESE VS. AMERICAN PACKING.

In regard to packing, the commissioner, in the report now under review, says:

Imports.—The net value aggregated 14,542,823 haikwan taels, or nearly 4,500,000* taels over that of 1897, the most noticeable feature being the large increase in the direct import trade (*i. e.*, from foreign countries), which, in this case, is solely due to the steadily and fast growing influx of Japanese goods exported from Kobé and coming direct to Chefoo, thus avoiding the cost of transshipment at Shanghai and affording a cheaper rate of freight to the shippers.

*Note by the Consul.—Error; should be 3,500,000.

Japanese cotton yarn advanced from 86,000 piculs to 182,000 piculs—one-third only of this amount arriving via Shanghai, while more than one-half came last year through that channel.

The chief distinction between the Japanese yarn coming via Shanghai and that imported direct from Kobé is in the weight and packing, which would seem to have been purposely adopted to suit the requirements of the overland markets. The ordinary bale from Shanghai weighs 3 piculs and is packed like piece goods; that imported direct from Kobé is a much smaller bale, weighing about 150 catties,* and roughly but strongly packed in coarse straw mats. This smaller bale is more easily carried by pack animals and does away with the splitting and repacking necessary when handling the larger and heavier 3-picul† bales. There has also been a fair demand for Japanese T cloths, the importation amounting to 21,000 pieces—a big increase, when compared with the figures of the previous years, which hardly average 2,000 pieces a year. The total importation of matches—1,496,000 gross—doubles that of 1897; and here also the Japanese industry predominates, which this year gives nine-tenths of the total importation. Turning to cotton piece goods (not including Japanese), the greater part of which are reexports from Shanghai, the chief increases are: American sheetings, 207,000 pieces; American drills, 21,000 pieces; while the principal decreases are: English and Indian T cloths, 68,000 pieces; English and Indian sheetings, 34,000 pieces. Under sundries, a big increase is to be noted in American flour—100,000 piculs—almost entirely for the use of foreigners at Port Arthur, Talienwan, and Weihaiwei. Kerosene oil shows a falling off as compared with the figures for 1897.

In my report "Packing for foreign markets," published some years ago,‡ I urged our merchants to pack their exports in small packages, and gave them the reason. The great bulk of merchandise is transported in small boats, on pack mules, or on the backs of men. All the hauling up and down, across mountains, along narrow passes in the mountains, or over the plains is by men. If our exporters could see how their merchandise is transported, they would know why the Japanese sell so much more than we do. Let them imagine that there are no railways or steamers, no great roads, nothing but narrow paths between New York and Washington, and see which would sell the more readily to the Washington merchant, the heavy package of 500 to 1,000 pounds or the small, strongly packed package of 100 to 200 pounds weight. Let them remember that the ports here are only landing places, and that merchandise is consumed inland.

The population of this port is under 40,000—the smallest of any of the coast treaty ports; it is, nevertheless, the second in shipping and sixth in trade, for it supplies a vast territory.

ADVANTAGES OF DIRECT TRADE.

Then, again, if the Japanese sell more by making direct shipments, why can not United States merchants do the same? American domestics are all sent to Shanghai; yet 90 per cent are transferred

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* 200 pounds. † 400 pounds. ‡ See CONSULAR REPORTS No. 160 (January, 1894), p. 225.

to the three northern ports—Chefoo, Tientsin, and Niuchwang. They are discharged into lighters at Woosung, towed to Shanghai, pay a wharfage or municipal tax on landing and on leaving, pay godown hire, extra insurance, brokers' commissions, besides, of course, duties (and the Chinese comprador takes off the steel or iron bands to sell to metal dealers, substituting old ropes); then the dealers have to ship again in local steamers to Chefoo, Tientsin, or Niuchwang. All that expense would be saved by direct shipments. In almost all other trades progress is manifest, but to the cotton-piece-goods men in the United States, Shanghai is to-day what it was forty years ago—all China. Of course, the agents there will raise objections to this suggestion, for they would lose valuable commissions; and as they are in many cases the agents for the shipping, they would, joined by the brokers and local guilds, be a power. But the Japanese have shown that direct shipments are successful.

The following letter on this subject is from a merchant who sells more American merchandise than any other, and, as he controls the interior foreign trade in household stores, etc., it is only reasonable to believe that he understands his subject:

CHEFOO, CHINA, *March 6, 1899.*

JOHN FOWLER, Esq.,
United States Consul, Chefoo.

DEAR SIR: I wish to bring to your notice some points relating to American manufactures and products. Through your efforts, American goods have been introduced and popularized, but I believe this can be done to a much greater extent if the people at home understood what is necessary. I would say, first, it is important to bring the manufacturer at home and the merchant here together. Doing away with middlemen's profits would doubtless bring a large range of American goods down to prices that would make them easily compete with the goods of other countries. I deal direct with several British manufacturers, but with only two American. For the latter, I sell large quantities of goods, probably twenty times as much as if these goods were supplied through agents. The saving to the consumer is from 25 to 40 per cent.

Manufacturers should be willing to send their goods on consignment to thoroughly reliable and pushing houses. They should send at first small quantities on the very best terms, knowing that the merchant may be able to order larger lots later. They should further send a liberal allowance of free samples. This is one of the most valuable means of advertising among Europeans in this country. Freight should be paid on first indents of hitherto untried goods. Attention should be given to packing for this market. Thus, butter is often packed in badly soldered and partially empty tins, which causes deterioration and makes a bad impression. Oils are put in bottles so thin that breakages average from 20 to 40 per cent. Outside packages are often so bad that goods arrive in a wretched condition. To refer to two or three articles: Watches, clocks, plated goods, and lamps should have a very large sale among the Chinese in this district, but I think it is still small. The leading brand of Swiss condensed milk costs, laid down here, only a little over half that of the leading brand of American.

Being a Britisher, I am not anxious that American products should push out those of Great Britain, but I am desirous of bringing the articles of the best value before my customers.

Yours, faithfully, JAMES MCMULLAN.

GENERAL TRADE NOTES.

Our merchants, in sending their wares to China, should also bear in mind that the covers, whether of tin, glass, cotton, or any other material, have a great influence upon the sale of the contents. All over China, the kerosene-oil tins are used for buckets or beaten out into sheets to be made into lamps, cups, or any purpose for which tin is used. The Chinese barter in everything; bottles, tins, wrappings, boxes, all have their market prices; nothing is wasted, while a glass bottle is used even by foreigners for keeping their drinking water. In every village one sees many shops devoted to the empty tin and bottle trade. The mistress of a house, perhaps with no special fancy for any particular brand, tells the servant to go to the shop and get such and such a thing. He will invariably buy that which has a cover most serviceable to him. If there are two kinds of vinegar, sauce, catchup, etc., one in a white, the other in a black or cheap bottle, he invariably buys that in the white bottle; for when the empty bottle is thrown away as rubbish and falls to him, he will get from the dealer far more than the other would bring. Wooden boxes are a prize; and wrappings, if cotton or canvas, no matter how small or soiled, are used for sails, clothes, shoes, etc.

A certain London house virtually controls the biscuit trade of Asia because its products are neatly and tastefully put up in 1-pound and 2-pound tin boxes. These boxes have a tight outer cover, easily taken off without cutting or mutilating. The inner cover is so arranged that one can catch hold of a stub and pull the top entirely off, take out what is wished, and replace the top cover, thus having a perfectly tight box. On the other hand, Americans place their biscuits in large, clumsy square tins, holding 5 or 10 pounds. The top must be cut open, leaving the contents constantly exposed to the damp and readily accessible to insects of all kinds. I have seen my cook shake small snakes out of such tins.

I suppose the American merchant who may read this will say, "Oh, we can not be bothered." He may be interested to know that the foreign merchant who reads it will study the suggestion and will adopt it.

Mr. McMullan speaks of a liberal supply of samples. A manufacturer in the West solicited my aid in introducing his brand of milk. After some correspondence, he sent a lot of samples, which Mr. McMullan distributed, with the result that he is now selling from

240 to 400 dozen tins a month of this milk. I know of many other instances.

On several occasions I have lamented the lack of trade papers, price lists, etc., sent to this consulate. I may not require a particular quotation in a year; but when I do want it, I want it badly.

For instance, a merchant came to me one night saying, "I have to cable for 700 tons of a certain kind of lumber; to whom shall I send?" I looked through the small assortment of papers on file here and finally had to refer him to Shanghai. Later, I was called on for 50,000 tons (not barrels) of cement. I sat up until 3 a. m. looking for an address, because the merchant said "this is only the beginning of an immense order." I could only show him an advertisement in a New York paper. He cabled to London.

For four months this winter, I was in communication with Chinese inland who wished to buy corn. For many reasons, it was difficult to persuade them that American corn was as good as theirs; as a matter of fact, the shelled corn sold here is one-third rubbish. Another thing that made them suspicious was that I would not go into the deal with them. The fact that I am on oath, not to mention a bond, not to go into business had no influence. Finally, another party brought a guaranty for the equivalent of $75,000 gold, placed it in my hands, and calmly told me to buy 60,000 bushels of corn, to have it here in five weeks. I did not have the name of a single dealer in the West. I did the best thing that I could; I begged for ten weeks and sent the cable to Washington,* and got no reply. It seems no one wanted to sell corn. Yet this was for 1,500 tons (and two more orders have been received since), and if carried through would have opened a market of 29,000,000 people who subsist on that article of diet entirely, and at a time when there was none of their own and the prospects of a poor crop this season.

That little experience in trying to open a new market for my countrymen cost me $40 gold (out of my own pocket).

But American merchants are discovering that there is a vast field on the other side of the world, and many are doing their utmost to capture the trade. Since our military operations have been carried on in the Philippines there has been an increasing stream of merchants from the United States, visiting this as well as the other northern ports of China.

It is absolutely necessary that our people keep their business in their own hands. A prominent lumber house on the Pacific coast had for a long time been represented in China by a foreign firm, but within the last year has had its own representative out here, a wide-awake New York man; his company now has all the lumber trade, and it has increased to enormous proportions.

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*See CONSULAR REPORTS No. 225 (June, 1899), p. 391.

A traveler for a San Francisco firm, discussing this subject, said recently:

Every American who comes here knows that you are right. I was sent out to appoint agents for our house and went to nearly every firm in Shanghai. They one and all declined or laughed at me, saying there were too many agencies of that line already. I determined to show them that there was room for another. I hired an office for six months in Shanghai. I went at it in the good old American way, and, although I've been here only a few months, I have sold $100,000 worth of goods and now intend to remain in the East for five years.

TRADE WITH GREAT BRITAIN.

To return to the customs report: Having shown the value of the net imports specified as American and those specified as Japanese, I find the following net imports specified as English:

Articles.	Quantity.	Value.
		Hk. taels.
Drills.....pieces...	10,310	34,095
Jeans.....do.....	4,410	10,498
Sheetings.....do.....	17,600	59,373
Cotton yarn.....pounds...	178,666	30,235
Camlet.....pieces...	250	2,783
Total.....	.....	*136,984

*Value in gold, $95,888.

Of course, this by no means includes all the English trade, for here, as in our own case and to a lesser extent in the case of Japan, there is a vast quantity of imports of English origin not so designated.

TRADE WITH BRITISH INDIA.

In the following table I include all the opium as Indian (British), although some of it is Chinese and Persian.

Indian imports into Chefoo during the calendar year 1898.

Articles.	Quantity.	Value.	
		Hk. taels.	
Opium, all kinds.....pounds...	66,261	333,108	.....
T cloths.....pieces...	2,272	3,872	.....
Shirtings.....do.....	600	1,920	.....
Yarn, cotton.....pounds...	6,531,466	1,039,089	.....
Total.....	.....	1,377,989	$964,592
Value of English imports.....	.....	136,984	95,889
Total value of English and Indian imports, including all the opium.....	.....	1,514,973	1,060,481

The value of imports known to be of Asiatic (mostly Chinese) origin, not included in the Japanese or Indian tables above and in the sale of which we do not compete—such as sharks' fins, dried

crabs, crocodile skins, seaweed, etc.—was 1,362,697 haikwan taels ($953,888).

TOTAL TRADE OF CHEFOO.

The value of foreign imports was:

Total		$10,179,986
Value of imports specified as American	$2,301,261	
Value of imports specified as Japanese	3,344,604	
Value of imports specified as English	95,888	
Value of imports specified as Indian	964,592	
Value of imports known to be Asiatic	953,888	
		7,660,233
Balance for all the world, origin not intimated in reports		2,519,753

A large share of this last belongs to us, to Great Britain, and to Japan. The value of the shirtings and T cloths in this classification was $830,253.71, not a dollar's worth of which was sold except by the United States, Great Britain, and Japan. Yet if, for the sake of argument, we allow that Germany sold everything else in the doubtful column, those figures still fall below our known imports by $611,761. Again, if we credit the imports of unknown origin to England, the total English figures would only exceed those of the United States by $314,380.

Value of direct imports for the calendar years 1897–98.

Country.	1897.*	1898.*	Decrease.	Increase.
	Hk. taels.	*Hk. taels.*	*Hk. taels.*	*Hk. taels.*
United States	5,758	125,034	.....	119,276
Great Britain	81,101	160,734	.....	79,663
Hongkong	1,622,493	1,501,454	121,039	.....
Continent of Europe, Russia excepted	11,776	24,011	.....	12,235
Russian Manchuria	86,156	74,877	11,279	.....
Korea	466,178	760,265	.....	294,087
Japan	1,299,640	3,579,147	.....	2,279,507
Formosa	111,378	58,254	53,124	.....
French China	570	.....	570	.....
Total, foreign countries	3,685,050	6,283,776	186,012	2,784,738
Value of imports from Chinese ports	7,940,014	8,928,378	.....	988,364
Total value of foreign imports	11,625,064	15,212,154	.....	3,587,090
Total value of foreign reexports	558,654	669,331	.....	110,667
Total net value of foreign imports	11,066,410	14,542,823	.....	3,476,413

*The average value of the haikwan tael in 1897 was estimated by the United States Director of the Mint at 73.9 cents; in 1898, at 70 cents.

The imports from Hongkong are all reshipments from foreign countries or from other Chinese ports. A large proportion of the exports from Canton are reshipped at Hongkong. The same rule applies to the Philippines, Straits Settlements, Swatow, Amoy, Macau, etc.

Comparative table of imports which name country of origin.

Description.	1895.	1898.	Decrease.	Increase.
T cloths:				
Indian ..... pieces...	16,335	2,272	14,063	.....
Japanese ..... do.....	2,620	21,356	.....	18,736
Drills:				
English ..... do.....	21,742	10,310	11,432	.....
Indian ..... do.....	3,120	135	2,085	.....
Dutch ..... do.....	2,100	180	1,920	.....
American ..... do.....	59,515	163,547	.....	104,032
Sheetings:				
English ..... do.....	31,385	17,600	13,785	.....
Indian ..... do.....	8,815	600	8,215	.....
American ..... do.....	154,540	543,470	.....	388,930
Japanese ..... do.....	1,000	1,760	.....	760
Jeans:				
English ..... do.....	7,103	4,410	2,693	.....
American ..... do.....	2,250	7,980	.....	5,730
Towels (Japanese) ..... dozen...	1,238	5,813	.....	4,575
Cotton cloth (Japanese) ..... pieces...	3,000	4,974	.....	1,974
Cotton crape (Japanese) ..... do.....	1,986	3,917	.....	1,931
Cotton yarn:				
English ..... pounds...	172,800	178,600	.....	5,800
Indian ..... do.....	12,043,600	6,531,400	5,512,200	.....
Japanese ..... do.....	1,062,900	24,312,500	.....	23,249,600
Shanghai ..... do.....	182,000	1,663,700	.....	1,481,700
Camlets (English) ..... pieces.....	927	250	677	.....
Copper slabs (Japanese) ..... pounds...	2,666	75,066	.....	72,400
Flour (American) ..... haikwan taels...	25,941	109,229	.....	83,288
Matches (Japanese) ..... gross...	132,341	1,355,838	.....	1,223,497
Oil, kerosene:				
American ..... gallons...	1,967,900	4,500,060	.....	2,532,160
Russian ..... do.....	610,000	109,940	501,000	.....

This table shows that English goods declined, the only exception being a gain of 5,800 pounds of cotton yarn. India lost over 5,000,000 pounds in yarn. America and Japan increased in every line.

It will not be long at this rate before the United States and Japan will supply the market entirely, unless we are shut out when Germany and Russia get their ports in order.

CHEFOO'S SHARE OF CHINESE TRADE.

The subjoined table shows Chefoo's share of the entire Chinese importations for 1898 of merchandise the origin of which is named:

Articles.	Into all China.	Taken by Chefoo.	Balance for rest of Empire.	Per cent taken by Chefoo.
T cloth:				
Indian ..... pieces...	83,852	82,272	81,130	0.027
Japanese ..... do.....	103,663	81,356	52,307	20.6
Drills:				
English ..... do.....	73,356	10,310	63,046	14.65
Indian ..... do.....	2,078	.....	2,078	.....
Dutch ..... do.....	18,318	.....	18,318	.....
American ..... do.....	1,314,761	163,547	1,151,214	12.43
Japanese ..... do.....	1,065	.....	1,065	.....

Chefoo's share of Chinese trade—Continued.

Articles:	Into all China.	Taken by Chefoo.	Balance for rest of Empire.	Per cent taken by Chefoo.
Jeans:				
English.....pieces.....	123,599	4,410	119,189	0.036
Dutch.....do.....	38,475	.....	38,475	.....
American.....do.....	105,759	7,980	97,779	0.075
Sheetings:				
English.....do.....	523,366	17,600	505,766	0.034
Indian.....do.....	16,520	600	15,920	0.036
American.....do.....	2,483,991	543,470	1,940,521	22
Japanese.....do.....	6,601	1,760	4,841	0.26
Handkerchiefs (Japanese).....dozen...	17,745	1,973	15,772	0.11
Towels (Japanese).....do.....	191,945	5,813	186,132	0.03
Cotton flannel (Japanese).....pieces...	56,835	.....	56,835	.....
Cotton cloth (Japanese).....do.....	151,329	4,974	146,355	0.033
Cotton-cloth crape (Japanese).....do.....	44,462	3,917	40,545	0.09
Cotton yarn:				
English.....piculs*...	73,590	1,340	72,250	0.019
Indian.....do.....	1,399,930	48,986	1,350,944	0.035
Japanese.....do.....	485,244	182,344	302,900	37
Camlets (English).....pieces...	46,162	250	45,912	0.0054
Flour (American).....haikwan taels...	1,774,712	109,229	1,665,483	0.062
Matches (Japanese).....gross...	11,073,025	1,335,838	10,717,187	11
Oil, kerosene:				
American.....gallons...	50,084,015	4,500,060	45,583,955	0.9
Russian.....do.....	19,926,246	109,940	18,216,306	0.054
Sumatran.....do.....	26,871,865	142,000	26,629,865	0.053

* 1 picul=133⅓ pounds.

Thus, of the imports specified as American, over 11 per cent of the entire amount imported into China was taken by Chefoo alone. Of the imports classified as Japanese, Chefoo received 13 per cent, while of the merchandise specified as Indian only 0.024 per cent came to Chefoo (excluding opium); and of those goods designated as English, only 0.047 per cent came here.

The value of the United States imports into all China for 1898 is given by the customs as 17,163,312 haikwan taels ($12,014,318), while the value of those goods specified as American sold in Chefoo was 3,263,837 haikwan taels ($2,301,261), leaving for the other twenty-five ports 13,899,475 haikwan taels ($9,729,633).

While the above shows how valuable Chefoo is to us as a market, it must not be supposed that our entire trade for this district has been included. The southern part of the province receives its supplies via Chinkiang and Shanghai, while the northern part is supplied from Tientsin; and it is known that a most extensive trade in our goods is now being done via Tsingtau. I think that this province bought at least one-third of the entire American exports to China in 1898.

We know positively that 90 per cent of our cotton goods are taken by the three ports of Chefoo, Tientsin, and Niuchwang, and

we know that Tientsin sends vast quantities of our goods into Shantung via the Grand Canal.

The fact that Chefoo has the smallest population of any open port on the coast shows that it is the interior trade that we depend upon. The Germans are gradually but surely obtaining control of the whole province. The ports north of this will sooner or later become Russian, as the territory which those ports supply is already under their authority. Of what avail will it be to us to have Tientsin and Niuchwang open if the interior is practically closed.

The Russians now will not recognize a Chinese postage stamp. Letters from China for the interior via Port Arthur or Talienwan must bear Russian stamps or a stamp recognized by the postal union. No one can land in those ports unless he is furnished with a passport. Travelers without passports must return here by first steamer.

A steamer leaves this port daily for Port Arthur and connects with the line of magnificent steamers of the volunteer fleet now making regular voyages to European and Asiatic Russia. One can leave this port at 5 p. m. and the next morning go on board a Russian volunteer steamer, and need not again set foot on shore until Constantinople, Odessa, or St. Petersburg is reached.

TRADE OPENINGS.

Ever since the Philippines came under our flag and Hawaii was added to the Union, I have been waiting to see if some publishing house in San Francisco would show energy enough to start a paper for these markets. A paper containing all the latest telegraphic news from Europe and the United States, from the Orient and the islands of the Pacific, with market reviews published just in time to catch the outgoing steamer for Hawaii, Japan, China, the Philippines, etc., would be of great benefit to merchants in those countries and a profitable undertaking. There are several papers published in London expressly for India, the colonies, and the East. Now that a New York house intends to start a bank in Manila, why should not one be started in China? For nearly ten years I have been urging our countrymen to establish a bank and a newspaper, and many times I have written of the benefits that would accrue from warehouses in Shanghai, Canton, Hankau, and Tientsin.

There is now also a most profitable field for a new line of American steamers from the United States. In fact, there is not shipping enough on the Pacific coast to meet the demand, and cargo is in many cases delayed six months for want of steamer room.

In spite of our large trade, only one American ship came here in 1898 direct from America. I think if ships destined for the northern ports would fill the spaces with old lumber, chips, the refuse of

lumber yards, it would sell at a good profit for firewood, as wood is extremely scarce and consequently very dear here.

Grapevines to the value of over $5,000 gold were imported lately from Austria. A demand for wire fencing is one result of the recently inaugurated vineyards. I think that sheet-iron buildings, if properly pushed, would take in Port Arthur, Weihaiwei, and Tsintau.

The Germans do a large trade in small, round, cheap brass buttons and aniline dyes, in which we might compete.

COUNTERFEITING TRADE-MARKS.

I wish to emphasize that our manufacturers should have their trade-marks and patents advertised on all articles so protected. It is also a good idea to have them registered in the consulates. The consul is then in a position to defend them against fraud, for the Chinese are known to be great imitators, and a great many Japanese goods are imitations of ours, trade-marks and all.

Only the past month, I got the Chinese authorities to issue an order threatening with severe punishment any native dealers having for sale an imitation of a famous make of Florida water. On one of my tours of inspection, I obtained a bottle of this fraudulent water. It was a very close imitation in bottle and label, but instead of New York, it bore the words "New street;" it is made in Japan. Condensed milk is another commodity that suffers in this way.

JOHN FOWLER,

CHEFOO, *May 25, 1899.* *Consul.*

TRADE CONDITIONS IN INDO CHINA.

Under the title of "Commercial information as to French Indo China," a Lyons silk merchant who has spent some years in the extreme Orient has just published a pamphlet, which ought to be in the hands of every American who wishes to do business in that part of the world. I give extracts below:

One of the most important questions is that of credit. In Indo China everybody does business on credit, from the highest functionary to the lowest employee. Settlements are made every month. Retail houses have credit for their goods of from fifty to sixty days.

It requires ninety days to transport goods from Paris to Indo China and ten days more are necessary for unloading and placing in the market. Merchants who can not give over six months' credit can not expect to sell in that market. The English and Germans, those redoubtable rivals in the Orient, are practical. They give one year's credit. An indispensable requisite is to have a large stock of goods on hand. They will always find purchasers and one will be ready at a moment's

notice to take advantage of circumstances. In packing, large boxes should be avoided as much as possible. In Tonkin, where the means for handling and storing are not of the best, it would be well to see that no package or box weighs more than 150 or 250 pounds. French boxes are too heavy and add too much weight to the merchandise.

The markets of Tonkin and of Anam are open to a large variety of goods, but I will here refer to what is of especial interest to Lyons. Silk naturally comes first, and the articles most in demand are: Black and colored satins, from 46 to 58 centimeters (18.11 to 22.8 inches) wide at from 1 to 3 francs (19 to 57 cents) per meter; polonaises unies and glacés, from 50 to 52 centimeters (19.6 to 20.4 inches) wide, up to 1½ francs (29 cents) per meter; black, colored, and glacé taffetas for petticoats, from 46 to 56 centimeters (18.11 to 22 inches) at from 39 sous to 3 francs (39 to 57 cents) per meter; black and colored damasks 55 to 56 centimeters (21.6 to 22 inches) at from 2½ to 5 francs (48 to 96 cents) per yard; printed foulards and pongees, 54 to 56 centimeters (21 to 22 inches), at from 1.05 to 3 francs (24 to 57 cents) per meter; crepes and light articles for undergarments, 48 to 50 centimeters (18.88 to 19.6 inches) wide at from 1 to 1.30 francs (19 to 25 cents) per meter; black cotton-back velvets from 46 to 48 centimeters (18.11 to 19.6 inches) wide at from 3 to 6 francs (57 cents to $1.15) per meter.

Articles embossed with false silver and gold work are extensively used in the ornamentation of pagodas and theaters, but nothing can be done in this line unless a large stock of goods is kept on hand.

The mandarins wear clothes of a dark violet color. This kind of goods should be sprinkled with designs of flowers, wide rather than long, ornamented with suns, dragons, Asiatic birds, peacocks, etc. The prices should be kept within the limit of from 6 to 12 francs ($1.15 to $2.30) per meter (39.37 inches). It is recommended to work tussah in this way, as it is cheap and has weight. The great desideratum is that the article be of silk and have some thickness. I would advise that such stuff be made in four or five colors or shades, with large flowers and light leaves, flowers in yellow, three tones of red and three of green. Make all of fine figured work, from 82 to 83 centimeters (32.28 to 32.46 inches) wide, preferably on a dark-blue background.

An important article is mosquito netting 2 meters (78.74 inches) wide, a heavy material, such as is now furnished by England. The French are now shut out of the Chinese market for this article, on account of the cheapness of the English goods. Cheap parasols would find a good market in Indo China. They should be of a richly colored material.

What is said in relation to Indo China applies with equal force to China proper, with its 400,000,000 population. France has an inestimable advantage over us in Indo China, on account of her tariff, which favors everything that is French and closes the doors as hermetically as exclusive tariff laws can close them upon everything that is not of French manufacture. But our manufacturers have an even chance in the race with all the great nations of the world in China, and will continue to have it as long as the open-door policy prevails. The vast population of China is only just beginning to develop its purchasing capacity. It is the richest field for the investment of money in industrial pursuits and for the consumption of the products of industry that the world has ever known. The wealth of the United States, Great Britain, Germany, France, and

other nations is moving in a continuous current toward the industrial fields of China. The part the United States will hold in the future in this great market must depend entirely upon the efforts that are made within the next few years, while the field is open to all.

JOHN C. COVERT,
Consul.

LYONS, *June 26, 1899.*

CINCHONA BARK AND QUININE IN JAVA.

Consul Everett writes from Batavia, June 16, 1899:

In a report last year (page 266 of CONSULAR REPORTS No. 217, October, 1898) I gave an account of the experiment in making sulphate of quinine in Java. The subject seems to have attracted some attention in the public press and among manufacturers, and recently I received an inquiry from a Philadelphia manufacturer * asking if it were not possible to import cinchona bark direct from Java without the intervention of the European trust, which is, and has been for a long time, crushing both the planters here and the European and American importers.

At first, the quinine factory at Bandoeng, Java, was successful, but the trust has again scored a victory. It seems that the syndicate of German manufacturers intends to lower the price of cinchona bark on account of the renewed large shipments from Java, and the planters here are again in the power of the trust, notwithstanding the extremely small supply of bark in Holland. The auction in May amounted to only 38,067 pounds of quinine of factory packing and 4,813 pounds of quinine of pharmacists' packing (quills).

The shipments of bark from Java in March were to the amount of 977,000 Dutch pounds (about 1,074,700 pounds); in April, 1,300,000 Dutch pounds (1,430,000 pounds); and in May, 1,150,000 Dutch pounds (1,265,000 pounds). This quantity was too large, although the demand for quinine is very great, and all the factories in Europe have more work than they can handle. But these large shipments put the German manufacturers in a position to draw on their own stock, in case the importers, on account of the low bids at the auction, do not feel inclined to sell. The syndicate has a stock of cinchona; just how large no one knows, but probably about three or four months' supply. Whenever the syndicate wants to depress prices, all it has to do is to bid low at the auctions, and, in case the importers do not care to give up their bark at such low prices, to make up the deficiency from its own stock.

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* To whom Advance Sheets have been sent.

When the shipments from Java are as large as they have been in the last two months, the syndicate knows that the supply of bark in the Amsterdam market is increasing so fast that after two or three months importers will have to sell their holdings for what they can get; and the trust quietly fills up its stock again at bottom prices. When the shipments from Java are small, it does not dare use its stock, for without this stock it would be helpless to control the situation.

In the months of January and February, Java shipped very little—less even than the demand—with the result that the trust bought everything in sight, because it did not dare touch its stock, not knowing when it could be replenished again. The unit price* then rose above 4½ cents.

The auction in London on the 25th of April was very lifeless; 4,628 packages were offered, but only 1,183 were sold, and at prices lower by 23 per cent than at the previous auction. At the auction on May 4, the price of the unit was depressed to about 3½ cents. The trust had been waiting for this, and, thanks to the heavy shipments of March and April, the planters and importers were again at its mercy.

The trust, however, did not lower its price for the sulphate of quinine. That remained at $12.86 per kilogram (2.2 pounds), which is equivalent to a unit price of a little over 4½ cents; so that it makes a very handsome profit.

The result of this lowered unit price is that the London quinine market, which before the auction was very animated, with plenty of speculation, has lost all of its spirit; for, with so big a margin between the price of quinine and the price of cinchona, no one cares to buy any more than is necessary for his immediate use. This killing of speculation is what the trust wants. The genuine demand for quinine has so increased latterly that the production of cinchona would hardly cover it, even if Java were to send 900,000 Dutch pounds (990,000 pounds) a month. If speculation were to intervene and help, as was the case in previous months, the trust would cease to be master of the situation, which it is at present, thanks to the failure of planters and importers to cooperate—master not only of the cinchona market, but of the quinine market.

It would seem that in some way the planters should be united. The annual report of one of the large plantations urged them to patronize the Pandan Aroem and Bandoeng factories here. But while the crops and shipments have been very large lately, the

*The unit of quinine means the percentage of sulphate of quinine in half a kilogram (1.1 pounds) of cinchona bark; thus, bark yielding 1 per cent with the unit price 4 cents would bring 4 cents per half kilogram, while bark yielding 5 per cent of sulphate of quinine would bring 20 cents per half kilogram.

quantity sent to the factories in Java has been very small, so that they are in great danger of having to close. The erection of the factories in Java was the cause of the higher unit; but instead of giving their bark to the local factories to work, the planters, as soon as the unit price rose to 4½ cents, shipped their crop of cinchona to Europe. The local factories work the bark for the planter on commission, the planter selling the quinine himself for the best price he can obtain. To give an instance of the opposition of the trust to the local factories, I will only mention that it is a current and pretty well substantiated report that it placed every available obstacle in the way of their construction. Machinery came here mysteriously damaged, bolts and fittings were tampered with, and orders were strangely delayed and filled unsatisfactorily. Even now, I understand that the factory encounters unnecessary delay whenever it has occasion to order new supplies from Europe.

By dealing direct with the planters, American importers could get either the cinchona bark or the manufactured sulphate of quinine at the very lowest prices, without the intervention of anyone, except perhaps a broker in Batavia to attend to the proper shipping of the merchandise. Already, a beginning has been made. Since January 18, 1899, the date of the first direct shipment of sulphate of quinine from Java to the United States, I have certified invoices for the shipment of 265,900 ounces of sulphate of quinine direct from here to different ports. Up to the present time, however, there have been no direct shipments of cinchona bark. I am convinced of the material advantage to be gained by American importers in getting their cinchona and sulphate of quinine direct from the planters, and I am ready to give information in the matter. It seems very shortsighted in Americans to swell the profits of a German trust.

Under date of June 20, the consul adds:

Since writing the above, a meeting of planters has been held in the town of Bandoeng, at which it was resolved to take measures to fight the trust. A suggestion was made to form a regular market in Batavia and keep the supply under their own control. Nothing was decided definitely, however. A committee was appointed to consult as to what was best to be done, with instructions to report to another meeting of planters not later than August 31 of this year. This committee consists of the richest and most influential planters in Java, and there is very little doubt but that something definite will result.

PROGRESS IN NEW CALEDONIA.

During the past fiscal year, certain noteworthy changes for the better have taken place in my consular district.

A Mr. Bernheim, owner of extensive mining property in the northwest of the colony, recently completed a narrow-gauge line of railway, 40 kilometers (24.85 miles) in length. The rails and rolling stock were imported from France.

Two other lines are in course of construction, one of 40 kilometers, on the east side of the island, at Kouaona, and one of 30 kilometers (18.6 miles) close to Bourail, a small town north of Nouméa. A line of 150 kilometers (93 miles), to be built by the local government, will probably be commenced in February next, the contract for which I hope will be secured by a United States firm. A fifth line, in the extreme north, is in contemplation.

The mining industry is in a flourishing condition; nickel, chrome, cobalt, and copper ores are being rapidly extracted. From every quarter of the globe, orders for minerals are received by the leading firms, and I am informed by the director of Le Nickel, at Nouméa, and the general manager of the firm of L. Ballande & Co., that they have taken important orders from the United States, and shipments are being prepared for that country.

The inspector-general of infantry, who arrived from France some time ago, has been examining the coast defenses. New forts are to be erected and the existing ones strengthened. Work in connection with this movement has already been started. Several million francs are to be expended, and the general trade of the colony can not fail to be benefited.

PAUL EUGENE WOLFF,
Commercial Agent.

NOUMÉA, *June 24, 1899.*

AMERICAN FRUITS IN THE ORIENT.

Numerous inquiries have been made of me by manufacturers and dealers in fruits as to the condition of the crop here in China, the prospects for selling orchard products, the size of packages preferred, manner of packing, etc.

I have answered specific inquiries direct; but since the inquiry just received from the State Board of Horticulture, of Portland, Oreg.,* covers the entire field, I make this general response, hoping

*Advance Sheets have been sent the board.

it will receive the attention from our dealers which the importance of the trade merits.

The condition of the fruit crop in China has little or no effect upon the importation. The tropical fruits do not come into competition with the product of the United States; and in the more northern districts, where northern fruits might be grown, the quality of the products, owing to the ignorance or indifference of the people, places them outside the pale of competition with good fruits.

The only exception to this rule, possibly, consists of grapes grown in the north of China, some varieties of which are excellent.

There is a steadily increasing demand among the natives for foreign fruits, whether canned, dried, or preserved. The European population look to these imported fruits almost exclusively to supply their tables. Tinned pears, peaches, and apricots come principally from America, while preserved fruits, jams, and dried fruits still come largely from Europe. The reason is apparent. The American manufacturer will not, or does not, meet the conditions required. Since there are no peaches or pears in Europe which can compete with those from California, the oriental merchant has no choice; in other lines, he is not so restricted. Prunes and raisins are largely used. The dried fruit is put up in bottles and sealed. In no other way can it be shipped to the Tropics without great loss, as the humidity of the climate or insects will soon render it unsalable. No fruits, biscuits, crackers, or any other food product can be safely shipped to central or southern China or the Philippine Islands without being sealed in glass bottles or tinned. The English and continental merchants and manufacturers understand this, and put up their fruits accordingly. If tinned, the tins are either painted or varnished to prevent rust and consequent loss to the merchant.

The American manufacturer has found a market for his product without these extra expenses, and is slow to meet the demand; hence dried fruits, jams, and tinned fruits are usually bought in other countries, where these necessary details are looked after.

American oatmeal finds little market here except via England, where it is put up in tin boxes of 2 to 4 pounds each.

If our exporters of fruit expect to hold the market in the Philippines or to gain a better footing in China, they should begin by studying the conditions and promptly meeting them.

Prices realized in China for fruits justify the expense necessary to put them up so as to insure their being in good condition when they reach the consumer.

A. BURLINGAME JOHNSON,

AMOY, *June 29, 1899.* *Consul.*

AMERICAN CANDY IN SOUTH AFRICA.

The small amount of sugar imported into this colony from the United States, as compared with other countries, led me recently to make an investigation. I find that the few candy makers here (manufacturers of what is known as "fine candy") state that American refined sugar "will boil by common fire and make whiter, cleaner, and better candy than that raised in Natal, Mauritius, or, in fact, any other country." I am unable to ascertain the imports of refined sugar alone, for the reason that candy is included with refined sugar in the returns; but the amount of both imported into and through Cape Colony from the principal countries of export is as follows:

Country.	1895.	1896.	1897.	1898.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
United Kingdom	4,357,263	1,343,383	1,517,109	1,465,314
Germany	1,927,153	3,538,017	5,794,083	4,013,744
Holland	968,555	2,210,140	2,198,053	1,375,781
Belgium	.....	.....	119,992	387,850
United States	311,504	223,483	319,669	244,194

The total imports do not seem to have fallen off to any extent. In 1895 they were 7,597,649 pounds; in 1896, 7,389,801 pounds; in 1897, 9,976,645 pounds; in 1898, 7,963,074 pounds. The decrease in 1898 was caused by the increase of production in Natal.

A very small amount of fine candy is made here, principally the cheaper, or "hard," varieties, and, consequently, nearly all the fine candies, as well as the bulk of the cheaper sorts, are imported. One does not find here the superior candies that are known in America, and no effort seems to have been made to introduce them. Recently, through the work of this consulate, a trade has been opened up with manufacturers of the United States and several heavy shipments are now on the water. I present these few facts to show that there is a market here, if prices are right. While I can not obtain figures showing the importations from the United States for the years preceding 1895, I am told that during the period when the bounty given by the United States to sugar growers was in force, nearly double the amount of refined sugar was received from that country.

J. G. STOWE,
Consul-General.

CAPE TOWN, *July 6, 1899.*

BOOTS AND SHOES IN LOURENÇO MARQUEZ.*

At present there are, to the best of my knowledge, no American shoes, either for men or women, for sale in the entire province of Mozambique. I am confident, however, that good lines of men's and women's shoes of American manufacture would be well received here, and would meet with a ready sale.

France, Austria, Portugal, and England have for a number of years supplied all the shoes worn on this coast, and it is a matter of considerable surprise to me that the American shoe manufacturers have not long ago looked into this trade.

The people here have for years had to put up with the poorest qualities of shoes, and have always been glad to get anything that was an improvement on what they had been, for lack of better goods, forced to wear. There are two American firms here that sell shoes at retail; but, strange as it may seem, at neither of their establishments can a pair of American shoes be found. I have had several talks with these people and have persuaded them to add American shoes to the lines they already carry.

As the climate of this country is hot and dry, and as the rainfall is very scanty, light boots and shoes are mostly worn by the inhabitants. I am confident that light shoes of American make, made of black calf, russet calf, white canvas, and patent leather, on the ordinary broad and medium toe lasts, will meet with a ready sale here. Laced boots and shoes seem to be preferred to all other kinds.

In shipping goods to this port, the American manufacturers should draw upon the consignees for the amounts due. The drafts should always be attached to the bills of lading, to be delivered by the local bank after the draft has been paid.

For the convenience of our shoe manufacturers who may wish to send price lists, etc., here, I give a list of names and nationalities of the various local importers of boots and shoes: Charles Woolf, American; Bendahan, Abejdid & Co., American; J. Danon, French; Isaac Benoliel, Brazilian; Oswald Hoffman, Portuguese; Bazar Baptista, Portuguese; Tayob Suleman & Co., Indian.

W. STANLEY HOLLIS,

LOURENÇO MARQUEZ, *June 14, 1899.* *Consul.*

* The above report was prepared at the instance of a Massachusetts board of trade, which has received a copy.

COMMERCIAL DEVELOPMENT OF SOUTH AFRICA.

On the 19th of last June I left Cape Town for a tour of South Africa, and have to report as follows:

CAPE TOWN TO KIMBERLEY.

The first afternoon, at Worcester, an additional engine was attached to the train as the climb up the Hex River Mountains began. The scenery of these mountains, and the ascent by many horseshoe bends, along precipices, through tunnels, from 15 feet to 5,000 feet above the sea level, reminded me of Colorado. In the distance on each side could be seen the "koppies" assuming all shapes and heights. These wastes are covered with a stunted bush, the food of the sheep that once roamed about in large numbers, now largely decimated by disease. At the foot of the koppies are some fertile fields, the principal products being kaffir corn and mealies. The kaffir corn, or grain, is in the tassel and not the ear; the mealie is like our indian corn, only smaller in ear and grain, and when ground and mixed with cold water is more palatable than our indian-corn meal when scalded. The mealie is planted in rows, both by hand and drill, and left to grow and mature. It is never cultivated, hence the plant runs to stalk and not to ear.

For two days and one night I rode over these wastes in the compartment cars of this country; at night furnished with a bed consisting of one sheet doubled, one small pillow, and two blankets, made up on the seat, for which I paid 10s. ($2.43). The monotony of the ride was broken by occasional small herds of cattle, sheep, goats, or ostriches, the latter coming up to the barbed-wire fence to watch the train as it passed. Speaking of wire fences, of which 7,000 tons were imported in 1897, mostly from the United States, it may be well for Americans to note that the iron posts were largely furnished by other countries. The iron post is I shaped, of wrought iron, and cast into a triangular, Y-shaped foot piece, tapering to a sharp point at the end, which is driven into the ground. The wires pass through holes in the post and are not fastened at each one, as in the United States, but every twentieth post is a heavy one, some cast and some made of old railroad rails. These are called "tightening posts," and here the "slack" is taken up by long eyebolts with two nuts. The gates are all of wrought iron, hung on heavy posts.

THE KIMBERLEY DIAMOND MINES.

The city of Kimberley is 647 miles from Cape Town—a ride of two days and one night. It has a population of 35,000 and the

greatest diamond mines of the world. The United States is represented here by a consular agent—Mr. Gardner F. Williams, who is the general manager of the mines. I was pleased to learn that many of the most responsible positions are held by Americans. The company occupies 200,000 acres of land, employs 15,000 natives and 25,000 whites, consumes each month in the "compounds" 25,000 pounds of mutton and 200,000 pounds of beef, turns out 220,000 carats of diamonds a month, uses 6,000 tons of coal a day, has 2,000 horses and mules, 12 stallions of the best breeds (some from America), and 200 brood mares. The shops connected with the mines for the manufacture and repair of machinery and supplies compare well with some of our large harvester factories or railroad shops. I was not at all surprised to see American machinery here. The immense driving gear of a pumping engine made in England had to be sent to Chicago to have the cogs cut. The company is operating an ice plant sent from Chicago and has three more ordered, each with a capacity of 5 tons per day and 20,000 cubic feet of cold storage; and a complete dynamite plant, with an American to manage it, is on its way here from America. The 150 miles of narrow-gauge railroad in and around the mines are laid with American rails, and every tie or sleeper is made of California redwood, which in this country is par excellence the best wood for such a purpose. It is also used in many other ways. Three ships from California have recently arrived with cargoes of the redwood and Oregon pine. The company sells its ice for half a cent per pound to all, while in Cape Town the charge is 4 cents per pound.

No corporation in the world does more for its employees. It has built the village of Kenilworth, covering 500 acres and occupied by 500 employees at nominal rents. Water and light are supplied free, and there is a club house, a library, reading rooms, athletic grounds, a park, and vegetable gardens, with vines and fruits of all kinds in profusion.

All the water used in and about the city flows through pipes made in the United States. I was pulled to Kimberley by an American locomotive, and there are several others now in use in Cape Colony. On the narrow-gauge railroad are thousands of trucks made of plate iron and holding about a ton of rock each, pulled in trains by small engines or by overhead cables. These trucks ought to be made in the United States and the tenders competed for.

Among the features of the mines are the "compounds" for the natives. On the four sides of a large square are erected one-story buildings, of corrugated iron, opening to the center of the square. They are divided into rooms which hold twenty people, who sleep in bunks three high. Within each compound is a store, which

supplies the natives with all the clothes, food, etc., they need, at very reasonable prices. In the center of the square is a large swimming pool, which is well patronized. Adjacent to the compound is a hospital, in which medical attendance, nurses, and food are furnished free to the sick or injured. Extending over the whole inclosure, which occupies several acres, is a wire netting to prevent the throwing over of diamonds inclosed in tin cans, etc., as was once done. Outside of the compound and 10 feet from it is a barbed-wire fence, 10 feet high, with fourteen strands of wire. An underground passage leads to the mine shaft and the men are examined as they return from work. Within the compound I visited (there are three) were 3,500 natives, and as it was Sunday they were all enjoying themselves, dancing, playing on musical instruments, beating drums, reading the Bible and the Pilgrim's Progress in their own language, singing hymns, cooking, sewing, smoking hemp in cow horns, and gambling. Some were clothed and some not; some had their teeth filed to resemble a saw, others their heads shaved except a fringe at the back; some were tattooed, and nearly all had holes through the lobe of their right ear to hold anything that might come to hand; I saw spoons, straws, feathers, and stubs of cigars used in this manner. The natives are under contract for six months and receive from 1s. to 3s. (24 to 79 cents) per day. They are not allowed to leave the compounds during the time of contract. No liquor is furnished them. They are happy and contented, and the system is good for the native, the industry, and the country. I saw some who had been in the compound for years and had no desire to leave it. They are kept in a detention room one week before their contract expires, where they wear gloves made of two disks of leather, locked to their wrists; their clothes are taken from them and examined, and at the end of the week they leave without carrying any diamonds.

The diamond mine is the crater of an extinct volcano. What is now a level country or prairie was once a volcano. Cropping out on the surface appeared a blue rock, which was found to contain diamonds. The mouth of the crater is 312 feet below the surface. They dug 300 feet lower, so that the mine is now 612 feet deep. The rock is elevated to the surface by means of powerful machinery and then conveyed to the "floors" or level ground, at present occupying about 200 acres. Here it is left for a year to the action of the sun, rain, and winds, when it decomposes and falls apart. It is then taken to the crushing and washing machines and afterwards to the pulsators, which separate it into various sizes and again wash it. It finally passes over shaking tables covered with grease of a certain composition, which catches and retains the diamonds. These are then washed in acid and taken to the valuator. Roughly speaking, out of 3,000,000 tons of blue rock three-fourths of a ton of diamonds are

obtained. The valuator assorts the diamonds according to their color and purity, and I saw on his tables the output of one week, worth $300,000. The diamonds are principally octahedral in shape. A syndicate of diamond buyers takes the product of the mines.

Kimberley and its mines are good customers of the United States, but we ought to have still more of the trade, and especially in galvanized corrugated sheet iron, which throughout all South Africa is used extensively. All the immense buildings of the mines in Kimberley and Johannesburg are composed of it, as well as thousands of dwelling houses, barns, warehouses, fences, etc. The large merchants in all the cities carry stocks of various lengths. It comes packed in bundles of twelve sheets, with thick felt between the ends of each sheet, all held together by iron bands.

THE ORANGE FREE STATE.

Leaving Kimberley, a ride of 167 miles brings one to the borders of the Orange Free State. The land appears more fertile. The villages of the Kaffirs and Hottentots are seen, the former looking like tops of balloons, the latter square and built of stones. The Kaffir huts are unique and show the natural skill and inventive genius of this tribe. Long branches or trunks of a tree that grows high and has a small diameter are planted in the ground in a circle, bent to the center, and fastened. Then the native flat grass is woven in and out between them, making a water-tight and yet cool habitation. Passing through the Orange Free State to the borders of the South African Republic, a distance of 334 miles, one sees nothing but the same monotonous landscape; but more and better farming is noticed and the crops are more diversified. A large number of American agricultural implements is sold here through Cape Town houses; in fact, a great proportion of all merchandise sold throughout South Africa comes through the large mercantile houses in Cape Town, Port Elizabeth, East London, and Durban, who have travelers all over South Africa. The Orange Free State is prosperous, though much land is idle. The people, principally Dutch, welcome all comers, and a residence of only a few years will admit to citizenship.

THE SOUTH AFRICAN REPUBLIC.

Pretoria.—On the border of the South African Republic we were held five hours for the examination of baggage. We then took the train of the Netherlands Railway, which is owned, it is said, by Hollanders, and proceeded to Pretoria, a distance of 77 miles. Pretoria is the capital of the Republic, a small city among hills, regularly laid out, with several handsome public buildings, but quiet and not a business center.

The next day I reached Johannesburg by the Netherlands Railway. I never rode over a better roadbed or in more comfortable cars. They are equipped with all modern conveniences, and the dining cars reminded me of home. The cars are all of iron, even the covering and sides, and in warm weather, I am told, are like a furnace; but no better railway equipment, as a whole, can be found anywhere. Johannesburg is a busy, bustling city—the only real city in South Africa, from the standpoint of an American. The buildings would do credit to any city. The streets are wide, but the motive power of the street railways consists of horses and mules, and, as the Boers believe that the substitution of other power would stop the sale of forage and horses, the Government will not grant a concession. Of course, an electric road would open up new territory. Electric lines should also be built in Kimberley, East London, and Durban. The horse cars still run in these cities, and the length of the present roads is great.

Johannesburg.—Johannesburg has been built up by the gold-mining industry, developed by foreign capital, and American ability has had a hand in the development, for Americans occupy the very necessary and responsible positions of managers, consulting engineers, and superintendents; and I was glad to learn that their ability was recognized by other countries. Mr. J. C. Manion, the United States consular agent at Johannesburg, is one of the prominent citizens. He has been the means of introducing mining machinery and supplies of all kinds of American manufacture, to the value of millions of dollars. I took pleasure in viewing the powerful engines, compressors, head gears, miles of piping, crushers, etc., that he had introduced. For 20 miles on each side of the city extend the head gears and smokestacks of mines—over 100 of them—which have made the city and State what it is and enabled President Kruger to sell a farm for $400,000 the day I was there.

The mining exchange, where the daily sale of shares occurs, is as lively and as unintelligible as our own stock exchanges. Over 15 tons of gold per month is the product of the mines, and the ground is only beginning to be worked. New discoveries are reported daily. The main reef crops out at the surface and the veins dip to great depths; some of the new shafts are going down to 3,200-foot levels. Complaints are made of the prices of dynamite, which costs 70s. ($17.03) per case, and could be bought out of the State for 40s. ($9.73); the Government granted the concession to a company which makes thousands of pounds sterling per annum out of it. A concession for the manufacture of candles has just been granted, so that the miners who use candles for underground work will be obliged to buy of the manufacturer, as the duty will be prohibitive. The railways, I was told, charge for freight from

the border to Johannesburg, a distance of 47 miles, as much as it costs to haul from the seaports, 1,000 miles away. I was informed that candles made in Belgium were mostly used, as they can be bought much cheaper, but the candle concession will stop all outside purchases. While the United States can not now compete for the candle trade, I am pleased to state that the factory will be equipped with American machinery throughout.

American steel and iron makers should have a share of the trade in the tool and drill steel used so largely in the mines. England and Germany now furnish all of it, and their brands are well known. American manufacturers of steel should send samples to J. C. Manion, United States consular agent. At one mine, I saw hundreds of drills on the platform that had just been sharpened. The cyanide tanks used at all the mines, as well as their heavy iron supports, should also be made in the United States. Size of tanks, 37 and 47 inches high, 8 to 10 feet in diameter. The copper plates used to catch the gold amalgam, the immense amount of structural iron, the iron trucks that carry the ore and that wear out so rapidly, the round-head screw bolts, the bolts that hold the shaft timbers, the wire rope that pulls the innumerable trucks, the hoisting mechanism, and many other things should also be competed for.

I regret to report that the imports of bottled American beer are falling off rapidly, the light German beer largely taking its place; but that brewed in the South African Republic is largely used and is considered very good.

DURBAN.

Durban, Natal, is twenty-four hours' ride from Johannesburg, which city I left wearing an overcoat, but at Durban I found warm weather and an abundance of fruit and flowers. This is a winter resort, and at present the hotels are full of people from the Transvaal. Durban carries at present the largest tonnage to the Transvaal, but the value of goods imported via Cape Town is the highest. Imports for January and February of this year were as follows:

From—	Quantity.	Value.
	Tons.	
Cape Town	20,117	$786,676
Durban	27,167	530,828
Delagoa Bay	26,645	387,328

I spent several days in Durban, calling on the merchants, talking trade, and comparing prices. One of them said to me:

I recently ordered 5 tons of hoop iron of an English manufacturer. After the order had gone forward, one of your American salesmen came along and made me a price $10 per ton less, and I gave him an order for 5 tons and then tried to have

the English order canceled, but the English house refused, and in their reply stated that "no one could make and guarantee a first-class article at the price named, and a test would prove it." When the iron arrived, I tested both, and the American was several per cent the best.

I could fill several sheets with just such agreeable statements. A number of the stores I have visited are well stocked and of a magnitude that was unexpected to me. Our wholesale houses in America are many of them small in comparison. Large stocks have to be carried, and goods are often kept in bond. The stores cover a good deal of ground.

The jinrikshas, pulled by Zulus, are the public conveyance and are used as are our cabs. The Zulus are the finest specimens of the black race in the world. They are mahogany colored, stalwart, intelligent, and easily governed. Those who pull the jinrikshas put the horns of animals on their heads and fasten the wings of large birds on their arms. Their arms, legs, ears, and noses are loaded down with iron and brass ornaments. No one is allowed to sell them any intoxicating drink, and they are consequently peaceable and happy.

I stopped at a hotel just being completed, and was pleased to note that all the doors and trimmings, and even the electric lights, were from the United States. In fact I was, during my whole trip, all the time putting my hands on something American. I was told that our "screw-drivers, hammers, hatchets, chisels, etc., were so cheap (though good) that it did not pay to grind or repair them—that it was better and cheaper to buy new ones."

Durban gets its meat and butter from Australia, and some of its wheat and flour. There are no mines, but the sugar and tea industries are growing; the labor is furnished by coolies from India. A company has recently been formed to manufacture fiber from the aloe plant. The fiber is a smooth, long, and strong article, superior to sisal and equal to manila.

The suburbs of Durban are on a range of hills and contain some of the finest residences I have seen anywhere. They command an ocean view and are surrounded with tropical trees, flowers, and fruits. Many people of means come here to live. We may look for some very handsome orders from this section.

EAST LONDON.

Taking a steamer of the Union Line, I left Durban for a seven days' voyage to Cape Town. I stopped in East London to visit W. H. Fuller, our consular agent there. He is of the firm of Dyer & Dyer, merchants, who have branch stores in other towns, do a large wholesale as well as retail business, and are firm friends of American

productions. Their stores, covering a whole block, are filled with American goods, and Mr. Fuller called my attention to the specimens of our furniture he had, which he pronounced good, and added that since United States manufacturers are now imitating English styles the demand will be larger.

The United States consular agents in South Africa are all representative, able men, well known and well liked, and are helping our commercial interests, as is shown by the statement that, although the total of imports into South Africa was less for 1898 than for 1897, the imports from the United States increased instead of falling off. East London is a business city and through its port passes a large amount of the imports and exports of South Africa. Tonnage (registered) of vessels that entered the port in 1898 amounted to 397,037 tons, and 253,351 tons were landed. Its total imports amounted in 1898 to £3,758,469 ($18,290,539) and exports to £978,-985 ($4,789,855); the goods in transit to the South African Republic amounted to £262,937 ($1,279,583). The imports of food stuffs for 1897 and 1898, most of which came from America, were:

Articles.	1897.	1898.
	Pounds.	*Pounds.*
Flour	8,962,716	10,845,961
Corn	18,146,683	14,717,640
Oats	1,093,627	58,854
Wheat	23,782,301	58,356,674
Meats (canned and preserved)	713,861	1,102,607

One can see in this city a stock of agricultural implements equal to that in any American city of equal size, and nine-tenths of the stock is of American manufacture. I would advise the plow manufacturers of the United States to send over, not salesmen, but mechanics and experts, to learn the wants of these customers.

PORT ELIZABETH.

From East London I sailed for Port Elizabeth, visiting the agency there while the ship was discharging cargo. One more stop was made at Mossell Bay, where I found a ship from America (a British ship) discharging a cargo of 1,000 tons of rails for a new railroad. I might add, in reference to Port Elizabeth, that the registered tonnage entering the port in 1898 was 1,794,671 tons, carried by 534 vessels. The total exports for 1898 were valued at £2,103,-351 ($10,235,958), of which wool amounted to £851,784 ($4,145,207), Angora hair to £589,510 ($2,868,504), and ostrich feathers to £442,-759 ($2,214,683). The total imports for 1897 were £8,411,606 ($40,-935,081) and for 1898 £6,645,030 ($32,338,038), and, while a decided decrease is shown, I state again, to impress it upon the minds of

our producers, that the imports from the United States did not decrease. American goods are liked, are bought, and with no unforeseen disaster will be bought in greater quantities from year to year if our manufacturers do their part.

Several corporations in the United States have also been incorporated in Great Britain, with offices in London, for the purpose of better commercial intercourse.

ELECTRIC LIGHTS.

I must make mention of the electric-light and telephone plants seen on the trip. At Kimberley the service is American and is good. At Johannesburg it is Dutch, and everyone is finding fault; no service is furnished after 5 p. m., and you must pay a year's subscription in advance—about $75 per month. In Durban it is German, and fair.

J. G. STOWE,
Consul-General.

CAPE TOWN, *June 15, 1899.*

BROOM FACTORY IN THE TRANSVAAL.

Consul Macrum, of Pretoria, under date of June 24, 1899, sends translation of a concession by which the Government of the South African Republic grants to Messrs. Gottstein & Lagesen certain rights and privileges in the manufacture of brushes and brooms. The consul adds that he understands that Mr. Gottstein is about to depart for the United States in quest of capital, machinery, material, etc. The substance of the concession is given below:

The Government gives the contractors the right to manufacture all kinds of brushes and brooms, made of hair, plants, fiber, etc., as well as painters' and all other sorts of brushes. The place of erection is to be specified by the Government and the construction of the factory is to be begun within twelve months. The contractors are to use, as far as possible, the raw produce of the Republic. The products shall not be sold at a higher price than the fluctuating market prices of the South African Republic, the additional special duty not being included. If the products of the factory are of a quality and quantity to satisfy the Government, a special prohibitive duty of 33⅓ per cent will be granted by the Volksraad. After the first three years, the Government is to receive 5 per cent of the net profits accruing from the above-named factory, this payment to be made yearly. Government officers shall inspect the books of the factory from time to time and exercise control of the working.

Nonfulfillment of the contract will involve a fine and revocation

of the concession. Disagreements shall be decided by arbitration, a final umpire (in case of necessity) to be chosen by the high court of justice of the South African Republic.

The contractors have the right to form a company. This agreement shall last thirty years and may be renewed under like conditions for a further period of thirty years.

NATIONAL DEBT OF CHINA.

Under date of June 15, 1899, Consul Ragsdale, of Tientsin, transmits the following statement, from the North China News of June 8, of the national debt of China. The sterling amounts have been reduced to United States currency in the Bureau of Foreign Commerce. The fluctuations of the Chinese silver tael render it impossible to reduce it prospectively to United States currency; it has, however, been reduced for past years at the values given by the Director of the United States Mint:

The Shanghai Customs Bank has recently published a statement of the loans contracted by China with foreigners during the last twelve years. The Customs Bank at Shanghai is a purely native institution and is conducted exclusively by Chinese familiar with the banking system of their own country. The amounts due by China on account of six loans are stated. There was a German loan in 1887 of 5,000,000 marks ($1,190,000). In 1894, the Hongkong and Shanghai Bank negotiated a loan of 10,930,000 taels ($8,306,800). In 1895, there were four loans negotiated. One for £1,000,000 ($4,866,500) was made by Messrs. Jardine, Matheson & Co.; the second for the same amount was negotiated by Messrs. Arnhold, Karberg & Co. The Hongkong and Shanghai Bank negotiated for £5,000,000 ($24,432,500). Russia and France lent 400,000,000 francs ($77,200,000). England and Germany lent £16,000,000 ($77,864,000). There was a supplementary £16,000,000 ($77,864,000), and this also was English and German. The sums, principal and interest, which China needed to pay for the German loan of 1887 have been paid, and there still remain the following sums:

	Taels.*
1899	213,000
1900	203,100
1901	193,300
1902	183,500

These payments will close the German loan.

The following sums will be paid to the Hongkong and Shanghai Bank for the loan of 10,900,000 taels in 1899:

	Taels.
1899–1904 (each year)	689,800
1905	1,675,100
1906	1,606,100
1907	1,537,200
1908	1,468,200

*The value of the haikwan tael was estimated by the Director of the Mint, July 1, 1899, at 72.8 cents.

The following sums will be paid to Messrs. Jardine, Matheson & Co.:

Year.	Amount.	Year.	Amount.
	*Taels.**		*Taels.**
1899	436,400	1908	702,500
1900	436,400	1909	675,400
1901	906,900	1910	646,000
1902	877,100	1911	615,300
1903	868,700	1912	586,900
1904	819,600	1913	557,800
1905	789,200	1914	528,000
1906	761,500	1915	499,600
1907	732,400		

*The value of the haikwan tael was estimated by the Director of the Mint, July 1, 1899, at 72.8 cents.

To Messrs. Arnhold, Karberg & Co., for a loan also of £1,000,000, the following sums, principal and interest, will be paid:

Year.	Amount.	Year.	Amount.
	*Taels.**		*Taels.**
1899	436,400	1908	702,500
1900	436,400	1909	675,400
1901	906,900	1910	646,000
1902	877,100	1911	615,300
1903	848,700	1912	586,900
1904	819,600	1913	557,800
1905	789,200	1914	528,000
1906	761,500	1915	514,200
1907	732,400		

*The value of the haikwan tael was estimated by the Director of the Mint, July 1, 1899, at 72.8 cents.

The Hongkong and Shanghai Bank negotiated a loan of £3,000,000 ($14,599,500). The following sums on account of this loan at 6 per cent will be paid in successive years as under:

Year.	Amount.	Year.	Amount.
	*Taels.**		*Taels.**
1899	1,309,100	1907	2,152,700
1900	2,763,600	1908	2,065,500
1901	2,676,400	1909	1,966,700
1902	2,589,100	1910	1,890,900
1903	2,501,800	1911	1,803,600
1904	2,414,500	1912	1,716,700
1905	2,327,300	1913	1,626,100
1906	2,240,000	1914	1,541,800

*The value of the haikwan tael was estimated by the Director of the Mint, July 1, 1899, at 72.8 cents.

The amount 19,191,700 taels will be paid to the Hongkong and Shanghai Bank every year from 1915 to the year 1934. During the years 1935 to 1944 the amount 6,074,400 taels will be paid to this bank each year.

The loan negotiated by Russia and France in 1895 for 400,000,000 francs ($77,200,000), together with the English and German loan of 1896 at 5 per cent and the subsequent English and German loan at 4½ per cent, both of £16,000,000 ($77,864,000), will, taken together, principal and interest, entail the payment each year of 19,191,700 taels ($12,474,605) from the year 1899 onward to the year 1934. In the year 1935 the 5 per cent payment will become 7,032,400 taels and terminate. The same year the 4½ per cent payment will be 6,074,400 taels and will continue each year until 1944. In that year 1,012,400 taels will be the last payment.

The payment of principal and interest together each year will, on account of the preceding liabilities, amount to about £50,000,000 ($243,325,000) per annum till the year 1902. After that year the debt will gradually diminish to £40,000,000 ($194,660,000) in the year 1911. In the year 1915 it will amount to £33,000,000 ($160,594,500). Just as the national debt of Great Britain has sustained an enormous diminution of late years, so it will be with the Chinese debt. In twenty years' time, the annual payments for existing loans will amount to about one-half of what they require at present. This is an alleviating circumstance in the outlook upon the future, and it opens the way for the negotiations of new loans during the era of railroad construction on which the country has now entered. In opening new lines of railway the system of loans will more and more be adopted, in order that those western countries which overflow with money may convey it to China, where there is felt to be a great want of it. If we reckon at 25 francs ($4.825) to the pound, the 400,000,000 francs of 1895 are £16,000,000 ($77,864,000). The annual payment of 19,291,700 taels represents, therefore, a loan of £48,000,000 ($233,592,000), contracted by China in the years 1895, 1896, and 1898. The German loan of 1887 was 5,000,000 marks ($1,190,000).

There are then a loan of a quarter of a million; a loan of £1,981,800; a loan of a million; of another million; loans of £3,000,000 and of £48,000,000; total £55,231,800 ($268,785,547).

The money added very beneficially to the circulation in China through loans during the years 1887 to 1898 amounts, therefore, to £55,000,000. These amounts will be paid back, but very gradually. Money flows in where it is wanted from countries where it is abundant, and coins diminish in intrinsic value while labor requires the same amount of muscular exertion and exhibits the same skill as it did of old. Money in the form of coins increases in relation to their number and indicates less value as the years roll on. The more abundant the coins circulated, the cheaper they become. They always tend, as they are multiplied, to represent a smaller amount of labor and skill than they did the year before. The true wealth of a country can not then be regarded as correctly estimated by the amount of current coin in circulation, or by the rate of exchange in any month or year. The real wealth of a country should rather be estimated by the number of laborers doing actual work and the amount of skill they possess in producing articles which are in demand for their excellent qualities.

In addition to the native-bank return of sums due for loans by China up to the year 1942, the Chinese papers also state the debt of China for every year to 1942 as presented to the Chinese Government by the inspector-general of customs. The sum due in the present year, 1899, is £53,021,840 ($258,030,794). Ten years hence it will be £42,153,257 ($205,138,825); twenty years hence it will be £29,038,130 ($141,314,061); and thirty years hence it will be £12,743,401 ($62,015,761). In the year 1942, the debt will be £799,275 ($3,889,343); but it can not be doubtful that new loans will be negotiated during the intervening years, and China is not likely to be free from debt at any time, so far as we can now foresee.

NATIONAL DEBTS.

In transmitting a detailed statement of the national debt of China, as printed in the North China News, Shanghai, June 8, 1899, Consul Ragsdale, of Tientsin, under date of June 15, sends the following condensed statement, from the same journal, of the national debts of the principal countries of Europe, reductions to United States currency being made in the Bureau of Foreign Commerce:

During the reign of George III the English national debt was at first reduced by £10,000,000 ($48,486,500), and afterwards on account of the American war was increased by £121,000,000 ($588,846,500). In the years 1784 to 1793 £10,000,000 were paid off, and in the year 1792 £2,400,000 ($11,679,600) were paid off. During the war with France, lasting from 1793 to 1815, money was spent lavishly. From 1793 to 1801, the average price of £100 ($486.50) 3 per cent stock to the purchaser was £57 17s. 6d. ($281.59); and from 1803 to 1815, £60 17s. 6d. ($296.61). In the year 1798 the ministry raised £3,000,000 ($14,600,000) at the rate of £200 ($973.30) 3 per cent stock and a 5s. ($1.22) long annuity for every £100 ($486.50) borrowed. In 1815 the Government needed £36,000,000 ($175,194,000), and they obtained it by paying to every subscriber £174 ($847) worth of 3 per cent stock and £10 ($48.66½) 4 per cent stock. This was, in fact, a payment of nearly 6 per cent interest. While the British Government was paying nearly 6 per cent interest for a loan of £36,000,000, the debt accumulated rapidly.

For comparative purposes and more direct reference, the details of the national debts of Europe are put into tabular form by the Bureau of Foreign Commerce, viz:

Country.	Debt.	
England	£683,000,000	$3,323,819,500
France	1,284,000,000	6,248,586,000
Germany	*107,717,015	524,204,853
Prussia	324,261,103	1,578,016,666
Bavaria	70,919,205	345,128,311
Total	502,897,323	2,447,349,830
Russia	†978,000,000	4,759,437,000
Austria-Hungary:		
Austria	119,000,000	579,113,500
Hungary	181,000,000	880,836,500
Common debt	229,000,000	1,114,428,500
Total	529,000,000	2,574,378,500
Italy	510,184,900	2,482,814,812
Spain	‡369,645,700	1,798,880,799
Grand total	4,856,727,923	23,635,266,441

* Interest, 3 per cent.
† Interest, £29,000,000 ($141,128,500).
‡ Interest, £19,627,946 ($95,519,403).

NOTES.

A New Textile Plant.—Consul Atwell writes from Roubaix, July 18, 1899:

Some years ago, an explorer in Asia discovered a plant of silken fiber, used by the Turcomans for the manufacture of withes and cord and by the Canagues for woven goods. This plant, known as the *Apocynum venetum*, is a sort of bush with slender, cylindrical branches, sometimes 6 feet high. It grows in Europe, Siberia, Asia Minor, the north of India, Manchuria, and Japan; but it is not cultivated, and, up to the present, has been used only in the natural state. The branches die yearly, and in the spring new shoots start horizontally from the roots. It flourishes best where the land is under water during a part of the year, notably in the neighborhood of rivers that overflow at stated periods.

Under favorable conditions, the *Apocynum* develops quickly, and in a short time the branches form a thick growth, almost like a miniature wood. The best fiber is obtained by cutting the branches in midsummer, when the plant has obtained its full growth.

The attention of the Russian Government was called to this plant in 1891. It is there known as the *Apocynum sibericum*, because it was first seen in Siberia.

It grows luxuriantly on the banks of the Amu, Darya, and the Ili, and the natives of these regions have used the fiber for many years for cord and fish nets. They value it not only for its great strength, but also because no care is required in its cultivation.

In 1895, the Russian Government began to use it in the manufacture of bank notes, and since then the plant has been cultivated at Poltava. The results obtained thus far are considered excellent, and the time is doubtless near when the *Apocynum venetum* will take an important place in the textile market.

Salmon Fisheries in Norway.—Consul Nelson, of Bergen, on July 11, 1899, sends a printed analysis of the report of the inspector of salmon fisheries in Norway, from which the following extracts are taken:

The average yield from the rivers for 1895–96 is put at 249,387 kilograms (549,958 pounds), valued at 249,127 kroner ($66,676); that from the coast fisheries at 792,477 kilograms (1,747,094 pounds), valued at 845,575 kroner ($226,614). The

yield from the rivers shows a diminution of 12,000 kilograms, as compared with the average for the three preceding years. The average number of bag nets in use on the coast increased, but the yield from the salt-water fisheries showed no improvement.

The Laagen is a long way ahead of the other rivers, topping the list with a total of 30,663 kilograms, and its prosperity is attributed in a great measure to the four days a week close time which was initiated upon it in 1880. The river fisheries obtain only something between a fifth and a fourth of the total annual take of salmon and sea trout.

As the result of a visit paid by Herr Landmark to the United States, a new departure was made in connection with the artificial hatching of salmon in Norway. Formerly the young fry were allowed to escape as soon as they began to require food, and, therefore, when in a very delicate and defenseless condition. They are now retained in captivity and fed four times a day, upon the raw liver of slaughtered animals, until the autumn, after the system which obtains in America. The results of the first year's experiment at the Government hatchery on the Drammen were satisfactory; on 280,000 ova treated, the loss was only 2 per cent, and in the middle of October about 211,000 fry were turned out; while the percentage of loss has been still further reduced of late years. A belief is prevalent among the coast fishermen that salmon and sea trout spawn successfully in salt water, and in this connection a series of experiments were conducted under proper supervision, from which it appeared that: (*a*) Roe taken from salmon captured in a river or from sea trout which have remained until the spawning time in sea water can not be successfully developed in salt water; (*b*) salmon and sea-trout roe impregnated in fresh water may be hatched out in brackish water containing a small percentage of salt, up to eight or nine per mille—that is to say, rather less than one-third of the salt contained in the sea water on the Norwegian coast.

New City and Port in Northern Russia.—Consul-General Holloway, of St. Petersburg, under date of July 14, 1899, says:

A new port was opened July 5, 1899, near the Catherine Harbor, the extreme northern point of Russia's possessions. The city will be called "Alexandrovsk," in honor of the late Emperor, at whose request S. I. Witte, Minister of Finance, visited the northern coast of Russia in 1894. The minister reported that the location of a city at a point where a good harbor could be found was necessary to the development of the Mourman region. Kola, the principal commercial town of that region, is on a narrow, shallow gulf, about 40 miles from the Mourman coast. It is inaccessible to ordinary vessels, and thus forces the trade of northern Russia to seek such Norwegian ports as Vardey, Hammerfest, etc. The Catherine Harbor was found to be located near the center of the marine industries of the Mourman coast, with ample depth to admit the largest steamers; and, by a strange freak of nature, the Gulf Stream keeps it from freezing during the winter. In 1896, the Emperor ordered this harbor improved and a city laid out, which has been carried out under the supervision of the Minister of Finance and the governor of

Archangel, at the small cost of $250,000, inside of five years from the time the improvement was first suggested. Work was begun only three years ago. The new port of Alexandrovsk will soon become an important center for the industries of northern Russia, as it is capable of enormous development.

New Ports Opened in Japan.—Under date of July 15, 1899, Minister Buck sends from Tokyo translation of an imperial rescript naming additional ports to be opened to foreign trade under the operation of the new treaties, as follows:

ARTICLE 1. Besides the open ports hitherto designated, the following are to be also open ports:

Shimizu, Suruga Province.
Taketoyo, Owari Province.
Yokkaichi, Ise Province.
Shimonoseki, Nagato Province.
Moji, Buzen Province.
Hakata, Chikuzen Province.
Karatsu, Hizen Province.
Kuchinotsu, Hizen Province.
Misumi, Higo Province.
Izuhara, Tsushima Province.
Sasuna, Tsushima Province.
Shishimi, Tsushima Province.
Nawa, Ryuku Province.
Hamada, Iwami Province.
Sakai, Hoki Province.
Miyazu, Tango Province.
Tsuruga, Echizen Province.
Nanawo (South Bay), Noto Province.
Fushiki, Etchu Province.
Otaru, Shiribeshi Province.
Kushiro, Kushiro Province.
Muroran, Iburi Province.

ART. 2. At the port of Muroran, only mugi (barley, wheat, rye, oats, etc.), sulphur, coal, and other commodities designated by the Minister for Finance, can be exported.

ART. 3. If in any of the ports named in article 1 the total amount of imports and exports of commodities comes short of 50,000 yen ($24,900), the said port is to be closed.

American-Asiatic Association of Japan.—The Department has received from Consul-General Gowey, under date of Yokohama, June 27, 1899, a report of the organization in that city of a society of American citizens under the above title. The constitution adopted sets forth the following as the objects of the association:

To foster and safeguard the commercial and other interests of citizens of the United States of America in Japan.

To promote a beneficial acquaintance and association among Americans in Japan, and by union and permanent organization to give more effective aid in behalf of measures intended to advance such interests.

To gather and distribute information of importance to its members.

To act in concert with, and aid in the purposes of, the American-Asiatic Association of New York and the American Association of China, and such kindred associations as may be hereafter formed in the Orient.

Any American citizen of full age, resident or temporarily residing in Japan, is to be eligible to membership. The dues are

to be 10 yen ($4.98), payable annually in advance on the 1st of July. There will be a meeting of the association in the city of Yokohama during the month of October in each year at a place to be chosen by the executive committee.

Petroleum in Dutch India.—Consul Everett, of Batavia, under date of June 22, 1899, sends translation of an article clipped from the Bataviaasch Nieuwsblad, of June 17, 1899, as follows:

An article on the petroleum trade, sent from Batum, Russia, to the Frankfurter Zeitung, pays particular attention to Netherlands India petroleum. It is as follows:

A sharp competition with American and Russian oils has sprung up in the East Indies, which, although recent, is making great strides. This industry has its center in the Sunda Islands and is principally in Dutch hands. In July, 1898, the industry in Sumatra had to weather a sharp crisis on account of the exhaustion of the oil wells. About this time, the Standard Oil Company was trying hard to establish itself in the Langkat (Sumatra) oil fields, but its efforts came to naught on account of the opposition of the Dutch Government. But as the oil fields in Java and Borneo did not decrease their output, but on the contrary became more rich in production, and as the production in Sumatra is again increasing on account of new wells being bored, the outlook is most promising. What progress this oil is making in the Chinese market the following figures will show:

Import into China.

Description.	1895.	1896.	1897.
	Gallons.	*Gallons.*	*Gallons.*
American oil	23,055,000	33,520,000	48,212,505
Russian oil	26,566,000	28,285,000	36,924,125
Dutch Indian oil	2,395,000	5,151,000	14,211,000

The figures for 1898 are not yet out, but it is estimated that the import of Dutch Indian oil for that year will easily show over 20,000,000 gallons.

An additional opportunity for Russian and Dutch Indian oils in the future is through the use of the residues for fuel on steamers. Even at present 200,000,000 poods (7,313,400,000 pounds) of residue are used each year in Russia, and this figure will be much increased during the current year, on account of the increase in mileage of the Russian railroads and in the number of war ships.

The firm of M. Samuel & Co., of London, which owns considerable oil territory in Borneo, has lately established along the Indian and Chinese coasts big storehouses for liquid fuel, and intends gradually to erect such depots wherever there are coaling stations.

Notes from Dawson City.—Consul McCook sends the following from Dawson City, under date of July 8, 1899:

About 2,000 people have left this place for St. Michaels during the past month, fully 1,800 of them bound for Cape Nome gold fields. The fares to St. Michaels for second-class passengers have been reduced to $35 with meals. One steamer took 235 passengers, some at the rate of $15 without meals, and yet even at this low figure

there are several hundred in Dawson who can not go. On account of competition on the Upper Yukon, fares to Seattle are now selling for $45, and to Lake Bennett at $15. Some $3,250,000 worth of gold dust has already been shipped from Dawson City to Seattle and San Francisco via St. Michaels.

It has been proved this winter that only very rich mines can be worked at a profit without machinery on account of the high price of labor and living. Hydraulic mining will soon have to be adopted in this country. The opportunity is now open for capitalists to buy claims to operate with machinery, which will yield rich returns for the money invested. Many representatives of English companies are now looking over the ground. The poor man's chances, so far as this country is concerned, are gone. In Alaska many opportunities are still open to a man of grit and perseverance. I understand second-class mail matter is allowed to come in now, while navigation is open. All who have friends here should take immediate advantage of this opportunity, and send magazines, papers, books, etc. (nothing too bulky, however), up to the 10th of September.

Collection of Customs in Canada.—Consul McCullough, of St. Stephen, on July 31, 1899, transmits copy of instructions issued to collectors of customs at the ports of entry in Canada, as follows:

CUSTOMS FORMS REQUIRING STRICT ATTENTION.

Importers are reminded that the customs regulations require that upon the invoice of all goods imported there shall be stated the number of packages containing the same, the marks of the packages, and the contents of each separate package. It is intended to enforce this regulation, and when the invoice does not conform thereto a sight entry will be required.

In the case of goods duty paid and short received, importers are notified that delivery of same upon subsequent arrival can be obtained without payment of duty anew only when the following regulations are observed:

(*a*) Notice of the short receipt of goods must be given to the collector in writing within ten days of the entry.

(*b*) If the goods have been omitted from the shipment, a declaration to that effect must be produced from the exporter.

(*c*) If a portion of the consignment has been delayed in transit by the carriers, a declaration to this effect will be required from the latter.

(*d*) No portion of a consignment of goods duty paid, in respect of which a short shipment occurs, is to be disposed of by the importer until the appraiser has had an opportunity of checking over the goods.

The ready and prompt delivery of duty-paid goods short shipped or detained in transit will be greatly expedited, if importers will instruct exporters to prepare invoices in accordance with customs regulations, showing the marks, numbers, and contents of each package on the same.

Notice in writing must be given to the collector within one month from time of entry, if an importer desires to return goods found to be not according to order.

Bonds in Guatemala.—Minister Hunter sends from Guatemala, July 15, 1899, translation of a recent decree in regard to the conversion into bonds of accounts against the Guatemalan Government, as follows:

EXTENSION OF TIME FOR THE PRESENTATION OF DOCUMENTS.

EXECUTIVE PALACE,
Guatemala, July 5, 1899.

The Constitutional President of the Republic, considering that various persons have presented themselves, soliciting an extension of the term fixed by Article I of the governmental decree No. 594, of May 23 last, for the presentation of documents of credit against the exchequer, because in the time fixed it has not been possible to obtain their legalization by the respective offices, owing to the fact that many of them are found outside of this capital, and because in some instances the documents which justify the credits exist outside of this country, decrees:

That the documents of credit treated of in Article I of the legislative decree No. 440 may be presented to the General Direction of Accounts from the 1st to the 31st of October of the present year for their bonification, and that upon the expiration of this new term the holders of those credits will be subject to article 2 of the above-cited decree No. 594.

Let it be communicated and published.

ESTRADA C.

Section of State in the Department of Finance.

PEDRO GALVEZ PORTOCARRERO.

Import of Silver Coins into Salvador.—Consul Jenkins, under date of August 9, 1899, transmits from San Salvador copy of a recent decree by the Government, which, translated, reads:

ARTICLE 1. The introduction of all silver money, whether in pesos or in fractional coins, which contain less than 900 fine and are less than legal weight, is prohibited.

ART. 2. The administrators of customs and revenues will cause this provision to be strictly enforced, confiscating all silver of alloy less than that stated.

ART. 3. Governors and departmental officers are instructed to prevent the introduction of the money above referred to.

ART. 4. A reward of 25 per cent will be given to persons denouncing the importation of money forbidden in virtue of this decree, and 10 per cent will be given to those in public employ who shall confiscate the same.

ART. 5. The present decree will go into effect on the day of publication.

Given in the Executive Palace on the 29th of July, 1899.

Venezuelan Duties on Tobacco.—The secretary of legation at Caracas, Mr. Russell, under date of July 22, 1899, informs the Department that the duties on tobacco have been increased from July 21 as follows:

(1) Cigarette paper, cut or uncut, 24 bolivars ($4.63) per kilogram (2.2046 pounds), net weight.

(2) Tobacco made into cigarettes with any wrapper whatever, 7.50 bolivars ($1.44) per kilogram, net weight.

(3) Twisted tobacco or any kind of chewing tobacco, 5 bolivars (96 cents) per kilogram, net weight.

(4) Tobacco worked up or prepared in any form not otherwise specified, 5 bolivars (96 cents) per kilogram, net weight.

Brazilian Tax on Letters Rogatory.—Minister Bryan sends from Petropolis, July 11, 1899, translation of a note from the Minister of Foreign Affairs to the effect that civil or commercial letters rogatory which may be received from foreign courts of justice through diplomatic channels can have effect in Brazil only after the interested parties or their attorneys have paid the stamp tax to which they are subject. Stamps for this purpose must be procured at the office of the Secretary of Justice and Interior Affairs when the letters are directed to the courts of the federal capital and at the appropriate sectional court where they are then sent in case the proceedings asked for are to be carried on in the States.

Fruits in Honduras.—The following, dated Utilla, July 1, 1899, has been received from Consul Johnston:

The movement of bananas has been fully up to the average on the coast, but Bay Island has not recovered from the storm of last October and November. The crop of pineapples, mangoes, and other fruits has not been favorable this season, on account of the want of rain. Prices are as follows: Bananas, 25 cents (gold) per bunch; plantains, $6.60 (gold) per thousand. The banana trust undertook to put the prices down, but the planters combined and refused to furnish bananas to the trust so long as other ships could take the fruit. The Bluefields Banana Company is now serving this section regularly, and its steamers are getting full cargoes. The imports are about the average for this season of the year.

German Trade with Uruguay.—Consul Monaghan, of Chemnitz, under date of June 22, 1899, writes:

The German press announces that Uruguay and Germany have agreed to go on trading on the basis of the commercial and shipping treaty of June 20, 1892, under which each is guaranteed the same rights as the most-favored nation. Germany, however, yields all claims to participation in the special concessions to citizens and

goods of the United States of Brazil, Argentine, and Paraguay. In 1897, Germany took from Uruguay imports worth $2,570,000. Of these, $1,569,134 were for extracts of meat, on which there are no tariff concessions. Skins and sheep's wool imports amounted to $688,296. Germany's exports to Uruguay were valued at $1,321,852. They did not suffer from differential duties, Uruguay having no tariff treaties with other countries. Up to date Uruguay has done nothing to speak of in the way of manufactures. Only agriculture has been developed. Textiles are among the most important classes of imports. The people that can send wares cheap, good, and suitable to Uruguay's needs will win her markets.

German Schools in Foreign Parts.—Consul Monaghan sends the following from Chemnitz, June 3, 1899:

It may not be generally known that Germany maintains schools in foreign countries. A fund is yearly voted by the Reichstag for this purpose. There is now an agitation in favor of granting the schools the right to award exemption from the long periods of military service; in other words, to grant the one-year-service diplomas. It is argued that when young men in foreign parts, born of German parents, can pass examinations and earn the right to serve in the army only one year, they will have greater inducement to retain their German citizenship. It is pointed out that boys born abroad, deprived of this right, go into other armies, and necessarily assume citizenship of the state under whose flag they stand. These facts have had great weight with the Government. The efforts of this people in foreign countries not only in selling the products of its industry, but in propagating its language and maintaining its hold on its offspring, are untiring.

Artificial Paving Stones in Germany.—Under date of July 29, 1899, Consul Monaghan, of Chemnitz, sends the following:

Artificial paving stones are being successfully produced in this Empire. The demand in all large cities is so great and the expense attached to their production under former methods is so large that any improvement on the older systems, whether in saving money or in producing a better stone, will be welcomed by almost all countries. The newest process here is to mix coal tar with sulphur and warm thoroughly; to the resulting semiliquid mass, chlorate of lime (Chlorkalk) is added. After cooling, the mass is broken into small pieces and mixed with glass or blast-furnace glass slag (Hofenglasschaum). This powder is then subjected to a pressure of 200 atmospheres and

reduced to the form or forms wanted. The specific weight of these stones is 2.2; the resistance against crushing is 143 kilograms (315 pounds) to the square centimeter (15½ square inches). The resistance to wear and tear in use is fully half as great as that of Swedish granite. Thus it commends itself through durability equal to that of many stone roads, resistance to changes of temperature, roughness of surface—giving horses a good foothold—and, finally, non-transmission of sound. Inasmuch as the joinings are very small, dirt is avoided and cleaning is very easy.

American Horses in Germany.—Consul Winter writes from Annaberg, under date of July 17, 1899:

With regard to the import of American horses into Germany, the Hamburger Nachrichten, in a recent article, says:

Importations from America have caused the horse raisers of Holstein to suffer much of late. A stock company has just been formed in Berlin for the express purpose of importing horses from the United States. The Americans have succeeded in breeding a horse which compares very favorably in every way with the Holstein animal, especially in those points so highly prized in a work horse, namely, broad hips and large build generally. The best markets for Holstein horses has always been the provinces of Saxony, Thuringia, and Brunswick. The demand is created by the large sugar factories. This market has been decreasing of late, owing to American horses being purchased in Berlin. A few days ago, this Berlin company shipped a drove of eighty through Hamburg en route for Milan, Italy, where they are to be used on the tramways. Almost every week, a long freight train filled with American horses leaves the Berliner Bahnhof for various parts of Germany. In spite of expensive freight and a tariff of $7 per head, the Americans have built up a very respectable competition in the German market.

Plague in Persia.—Vice-Consul-General Tyler writes from Teheran, June 22, 1899, that, according to reports from British medical officers, three or four cases of the plague have occurred at Bushire. The authorities in Bushire have endeavored to conceal the outbreak. Mr. Tyler adds:

The great heat and the dryness of the atmosphere which at the present time prevail in most parts of the country will probably prevent its transmission inland to any great extent, if not extinguish it altogether. My own observations incline me to the opinion that altitudes above a certain elevation are a considerable protection against the inroads of this disease. The present is the season for collecting the dates, which grow 50 or 100 miles from Bushire and which are exported largely from that port to many parts of the world, some, I believe, being sent to the United States.

Proposed Steamship Line to New Caledonia.—The following, dated Nouméa, June 24, 1899, has been received from Commercial Agent Wolff:

At a recent meeting of the provincial council of New Caledonia, the question of granting a subsidy for steamers to run at regular intervals between Tahiti and Tonkin, via New Zealand and New Caledonia, was discussed. Propositions from a French and a New Zealand company were considered. United States trade would be promoted by steamship service between San Francisco and Tonkin, via Honolulu, Tahiti, New Caledonia, and the Philippine Islands. The subsidy asked for by the steamship company of New Zealand from the New Caledonian council is 250,000 francs ($48,250). It is probable that at least 150,000 francs ($28,950) will be granted by Tahiti, and 500,000 francs ($96,500) by the government of Tonkin. Four steamers of 2,000 tons each, two of which could be furnished by a firm of Nouméa, would be sufficient for the service.

Hog Meat in Singapore.—Consul-General Moseley writes from Singapore, July 19, 1899:

It seems that the attention of our large packers of bacon, hams, and lard should be directed to the high prices of the product of the hog in this market. Bacon retails at 45 cents silver (21.6 cents) a pound; ham, from 55 to 85 cents (26.4 to 40.8 cents) a pound; and lard at 45 cents (21.6 cents).

So far as I have been informed, there is no American bacon, ham, or lard for sale here. Singapore is a depot for a large territory, and I believe a good demand for the products of the American hog could be created here, if proper efforts were made by our packers.

Tinware in South Africa.—Under date of July 28, 1899, Consul-General Stowe, of Cape Town, transmits the following information relative to the use of tinware in South Africa:

The principal fruit canner in Cape Town is the firm of Hill & Co. There are fruit canners in East London, Port Elizabeth, both in Cape Colony, and in Durban, Natal. There are houses outside of these engaged in canning fruit in all those cities, and in position to sell tinners' machinery when a demand therefor arises. The little machinery used in can making comes from the United States and England. The American sales are made through New York export commission houses, whose representatives are regular callers at Cape Town. The local tin working is of such minor importance that I have been unable to find a tinner who could make "gem pans."

Geo. Finley & Co. and Woodhead, Platt & Co., both of Cape Town, would handle tin-working machinery and tools. Tinners' machinery is free of duty, while tinware is subject to a duty of 9 per cent.

Electric-Railway Project in France.—Consul Skinner writes from Marseilles, July 12, 1899:

I am advised that the Paris, Lyons, and Mediterranean Railway Company, headquarters at 88 rue St. Lazare, Paris, has undertaken the construction and operation of an electric railway between Fayet and Chamounix, at the foot of Mont Blanc. The line is to be in operation within twenty months, and it is to be presumed that the company will be interested in propositions for machinery and equipment. Power is to be furnished by the River Arve. The cars are to be automobiles, each supplied with its own motor. The contract for building the road proper and providing the water power has been divided into two parts and awarded to Gagner & Frères, of Annency, and Richard & Meynard, of Avignon.

Electric Tramways in Nice.—The following, dated Nice, August 11, 1899, has been received from Vice-Consul Piatti:

In the course of an interview which I had yesterday with the mayor of Nice, I learned that the new electric tramways which were to be operated about October 15 will, until the 15th of December, be run by horsepower. The reason given is that the existing telephonic wires are not of sufficient strength to resist being affected by the power used for the tramways, so that they must be replaced by strong cables placed underground; but not a single concern, it is said, can be found in France to deliver the necessary cables before November 1.

This, in itself, may not be a fact of paramount importance; but, reverting to the continuous attempts made by this consulate to induce our manufacturers to cultivate the very considerable opportunities offered by the port of Nice for a direct trade with the United States, it may not be out of place to say that in this instance an American firm might have competed with success in furnishing the necessary electric cables.

Street Railways in Frankfort.—Vice-Consul-General Hanauer writes from Frankfort, July 22, 1899, to the editor of a New York journal (to whom a copy has been sent) in part as follows:

The total length of the street-railway system in Frankfort at the

end of the year 1897 was 30½ kilometers (18.9 miles). The gross receipts during that year were 2,655,685 marks ($632,000), of which 288,722 marks ($68,000) were paid to the city treasury, according to contract. There were 781 horses and 197 cars in use, and 26,507,403 passengers were carried during the year. The net proceeds amounted to 430,491 marks ($102,457).

Railways in the Transvaal.—Consul Macrum, of Pretoria, on July 6, 1899, writes:

Referring to my report of June 13, 1899,* re construction of the Rustenburg and the Lydenburg railways, I have to state that a notice has been published extending the time for the sending in of tenders on the construction of the Rustenburg line until Thursday, October 12 next, at noon. This is done for the purpose of allowing foreign contractors time to bid, and makes the time on both the Pretoria-Rustenburg and the Belfast-Lydenburg lines the same.

Contract for Railway in Peru.—Minister Dudley, of Lima, under date of July 14, 1899, sends translation of a resolution awarding to Mr. Ernesto Thorndike the contract for building the railroad from Oroya to Cerro de Pasco.† It appears that Mr. Thorndike was the only bidder. The contract is to last for twenty-five years. The rates for passengers are to be: First class, 6 cents (2.6 cents gold); second class, 3 cents (1.3 cents), per kilometer (0.62137 mile).

Work on Guayaquil Railway.‡—Minister Sampson, under date of July 17, 1899, writes from Quito that on the 16th instant active work was begun in the construction of the Guayaquil and Quito Railroad. A United States company is interested in this work.

Proposed Portuguese Exhibition in South America.—Minister Finch, of Montevideo, under date of July 11, 1899, sends translation of an editorial in a local paper, discussing prospective reciprocal treaties between Portugal and Argentina and Uruguay. As a means of extending Portuguese trade, a movement, it appears, is now being agitated to establish annual exhibitions of Portuguese products at a convenient port of the River Plata.

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* See CONSULAR REPORTS No. 228 (September, 1899), p. 100.
† See CONSULAR REPORTS No. 227 (August, 1899), p. 726.
‡ See CONSULAR REPORTS No. 222 (March, 1899), p. 364.

Flour in Guatemala.—According to a Government decree issued on August 11, 1899, which has been transmitted by Consul-General Beaupré under date of August 22, flour will be admitted free of duty into Guatemala during the month of October. The duty on flour imported into Guatemala, according to its tariff schedules, is 5½ centavos per kilogram (2.2046 pounds) and 15 per cent additional duty. Thirty per cent of the duty is payable in gold and the balance in silver.

Waterworks at Tampico.—The following, dated Tampico, July 19, 1899, has been received from Consul Magill:

The governor of the State of Tamaulipas has authorized this city to proceed with the construction of a system of waterworks and sewerage. This report is somewhat in advance of the official city notice, which I presume will outline a plan, but I send it in order that corporations or individuals interested in such contracts may write to me or to their agents in Mexico, to get the details as soon as published.

Demand for Automatic Lawn Mowers and Incubators.—Consul Le Bert writes from Ghent, July 25, 1899:

I have this day received a request from Dutry-Colson, No. 12 rue des Champs, of this city, for the names and addresses of manufacturers of automatic lawn mowers and of incubators. This firm is one of the oldest, most reliable, and largest general hardware and machinery houses in this consular district. They request immediate replies, as they are now holding orders for such goods.

Inquiry for Iron and Steel in Belgium.—Consul Le Bert, of Ghent, on August 15, 1899, writes:

Mr. M. D. Levison, No. 58 rue Van Eyck, of this city, desires names and addresses of manufacturers of pig iron, Thomas; hematite and manganesian (Spiegel); bar steel; blooms, Thomas and Bessemer.

He states that if prices are satisfactory, the transaction will be of considerable importance. Prices should be given c. i. f. at Antwerp, net cash.

Failures of Norwegian Paper Mills.—Consul Bordewich, of Christiania, under date of June 26, 1899, informs the Department of recent failures in that city. Five of the largest manufacturers of

paper and cellulose have failed, and the value of nearly all classes of stock has declined.

The Norwegian output of wood pulp, adds the consul, will in all probability be reduced for some time to come.

Operation of Japanese Copyright Law.—Minister Buck writes from Tokyo, June 30, 1899, that, according to an imperial ordinance published on the 28th instant, the new copyright law* will be enforced on and after the 15th of July, 1899.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
F. M. Brundage, Aix la Chapelle.	July 26, 1899	Dairying in foreign countries.	Department of Agriculture.
A. J. Nathan (consular clerk), Tangier.	Aug. 1, 1899	.....do.....	Do.
A. D. Barlow, Mexico City..	Aug. 5, 1899	.....do.....	Do.
W. M. Osborne, London.....	Sept. 5, 1899	.....do.....	Do.
M. J. Carter, St. John's, N. F.	Sept. 9, 1899	.....do.....	Do.
F. A. Gudger, Panama.....	Aug. 31, 1899	.....do.....	Do.
E. Schneegans, Saigon.....	June 20, 1899	Rice market.....	Do.
Do.....	July 4, 1899	.....do.....	Do.
Do.....	July 18, 1899	.....do.....	Do.
M. H. Twitchell, Kingston (Canada).	July 31, 1899	Crop report.....	Do.
Do.....	Aug. 31, 1899	.....do.....	Do.
A. G. Seyfert, Stratford.....	Aug. 29, 1899	Agricultural report.....	Do.
W. H. H. Graham, Winnipeg.	Aug. 31, 1899	Crop report.....	Do.

*See CONSULAR REPORTS No. 226 (July, 1899), p. 416.

FOREIGN REPORTS AND PUBLICATIONS.

Markets of Siberia.—The Moniteur Officiel du Commerce, Paris, March 23, 1899, has the following:

The importance of the Siberian market has long been recognized. The Germans especially are taking possession of the new field in oriental Siberia by the building of the railway of the Ousouri from Vladivostock to Khabarovka. A German-Siberian company has been formed at Hamburg, under the protection of the Government, for the purpose of developing commercial relations between Germany and the district of Amur. Khabarovka has been made the center of operations. Agents provided with samples have been established there, ready to exchange them for the raw products of the country. The extension of German commerce in Siberia is shown in the Russian official reports, where the statement is made that 30 per cent of the total commerce of Siberia is with Germany; Russia has 25 per cent; England follows with 15 per cent; Japan, 13 per cent; China, 12 per cent; and, lastly, the United States, 5 per cent. The port of Vladivostock is free, except for the following articles: Alcoholic liquors, tobacco, matches, petroleum, varnish, sugar, confectionery, and preserved fruits. It is one of the most beautiful roadsteads of the East, and, as a commercial and military center, by far the most important port of oriental Siberia. Besides being the naval base for the formidable fleet which Russia keeps in the Pacific Ocean, it is the terminus of the Trans-Siberian Railway, which from day to day increases its commercial importance. The commerce of the United States with Vladivostock has considerably increased. In 1897, 12,641 tons of American goods entered, against 3,180 tons in 1896. Exporters of American wood have established a permanent agency at Vladivostock. Wood from Oregon is used in the construction of the Manchurian Railway. The work on this branch line is divided into three sections, and is carried on systematically without interruption. The work is controlled by Russians, the coolies having Cossacks for overseers. American locomotives will soon be passing over the rails. A Belgian syndicate has obtained the monopoly of the restaurants and hotels to be established along the whole line of the road. A United States firm has the contract for the cartage of materials for the road and has established a branch office at Niuchwang. In addition to its fleet of steamers, this house uses several Japanese boats.

Not only is gold found in Siberia, but silver, lead, copper, coal, and iron have been discovered in great quantities along the Trans-Siberian road. The coal measures of Kuznezk contain about 27,000 square miles and include the extraordinarily rich mines of Koltschouginks, besides enormous beds of anthracite. Measures have been taken to develop these mines; the Government has furnished the necessary funds. This will create a large market for machinery, tools, and material of every kind. Cement, wood, iron and steel, lead, cast-iron and forged pipes are already in great demand. From the 8th of September, 1898, to the 1st of January, 1909, the Russian Government has declared machines and pieces of machinery destined for the working of mines to be free from duty on all the frontiers of the Empire. Not only is there a great market for mining machines, but hundreds of other articles will find an assured sale. The field for agricultural machines is immense.

The economic situation of the Siberian peasant is, all things considered, very favorable. With 200 or 250 rubles ($103 or $129) he can own a farm, carts, tools, horses, cows, and other domestic animals. Farm laborers get from 50 to 75 rubles ($25.75 to $38.63) a year. A workman in a manufactory gets from 15 to 30 rubles ($7.72 to $15.45) a month. Food is generally cheap. Emigration into Siberia increases every year. More than 100,000 planters from European Russia arrived in 1897. There are twenty-eight towns of over 5,000 inhabitants. The commerce of Siberia is concentrated in these towns and is generally in the hands of a small number of individuals, but the peasant is the great consumer.

Agriculture and Trade in Tunis.—The Revue du Commerce Extérieur, Paris, June 3, 1899, has an article on the commerce of Tunis, which is summarized as follows:

Before the French occupation, Tunis was exclusively a farming country; the exports were the production of the soil—cereals, live animals, olive oil, skins, ores, and wines—and the imports were chiefly manufactured articles—machinery, tools, building materials wood, and colonial commodities.

At that time, the highest figures reached by the commerce of the country was 27,000,000 francs ($5,211,000). In 1897 the total was 90,500,000 francs ($17,466,500), notwithstanding a series of bad harvests and a commercial crisis. In fifteen years, the commerce of Tunis has trebled.

A phenomenon, not less interesting, is the change in the commercial current of the country. In the years which preceded the treaty, France struggled painfully with Italy and England for the Tunisian market. To-day, she has scored a decisive victory. Since 1890, the exports from Tunis into France have increased from 5,000,000 francs ($965,000) to nearly 30,000,000 francs ($5,790,000); while the imports from France into Tunis rose from 16,000,000 francs ($3,088,000) to 27,000,000 francs ($5,211,000). This favorable showing is due to the law of July 19, 1890.

From the moment when France ceased to treat as an economic enemy the country under her protection, there was an increase of commerce. A study of the annual statistics published by the customs of Tunis shows that the greater part of Tunisian products benefitting by a reduced tariff on entering France take the road to the metropolis—*i. e.*, 78 per cent of barley, 89 per cent of oil, 92 per cent of wheat, and 99.47 per cent of wine—while the products which can enter only under the minimum French tariff have remained stationary at about 25 per cent.

Nothing is more certain than that any encouragement granted to the exportation of Tunisian products will increase in the same ratio the importation of French goods. Agriculture in Tunis is easy and remunerative; manual labor—Arabs and skilled negroes—can be readily obtained for 1.50 to 2 francs (29 to 39 cents) per day.

In October, 1898, a colonial school of agriculture was opened in Tunis under the most favorable conditions. The course lasts from October to July and is fixed for two years. Students devote a large part of their time to practical farming; they are trained to care of, harness, and manage animals; to use farming implements—in short, they do the greater part of the work of the farm and garden, in this way acquiring the experience so indispensable to a farmer. Pupils of this school are exempt from the two years of military service, provided they become residents of Tunis before the 1st of January of the year of their entrance into the army, and that they continue to live for ten years in the colonies. The school has connected with it a botanical garden, with the most varied collection, which distributes every year numerous plants to farmers; also a testing farm, an agricultural station, a

sample oil manufactory, a meteorological station, a branch for vine culture, and an apiary. These different establishments furnish precise data as to agricultural conditions in North Africa, while serving as practice fields for the pupils. Written competitive examinations for admission to this school are held each autumn in the principal towns of France.

Commercial Movement of Cyprus.—The Moniteur Officiel du Commerce, Paris, April 20, 1899, gives the total of the commerce of Cyprus for 1897 as 13,081,075 francs ($2,524,647), divided as follows: Imports, 6,585,525 francs ($1,271,006); exports, 6,495,550 francs ($1,253,641). An increase in the value of imports of 584,250 francs ($112,760) as compared with the previous year and a decrease of 773,825 francs ($149,348) in the exports for the corresponding period are noted. The principal imports are: Cotton thread, tissues of cotton, tissues of wool, tobacco, flour, sugar, petroleum, soap, leather, hides, wood for building, manufactures of iron, earthenware, and glass. The chief exports of the island are carob beans, oats, live animals, wines, liquors, sponges, oranges, lemons, fresh and dried grapes, straw, and cocoons. Since the establishment of a direct and regular service between Egypt and the Island of Cyprus, there has been a marked increase in the exportation of fresh fruits and vegetables.

Trade of British New Guinea.—The last annual report to the British Government has the following statistics:

The total value of the trade of the colony for the year 1897–98 was £96,830 ($471,223), divided as follows: Imports, £46,971 ($228,584); exports, £49,859 ($242,639).

The progress of trade during the last three years is shown in the following table:

Year.	Imports.	Exports.	Total.
1896	$167,997	$94,415	$262,412
1897	250,094	215,805	465,899
1898	228,584	242,639	471,223

The chief articles of import in 1897–98 may be arranged as follows:

Articles.	Value.	
Food stuffs	£17,246	$83,928
Drapery and clothing	3,898	18,970
Tobacco and cigars	4,931	23,997
Hardware	2,192	10,667
Beverages	3,819	18,585
Building materials	1,463	7,120
Other articles	13,422	65,317
Total	46,971	228,584

The imports show a decrease of $21,510 over those of the previous year.

The exports for 1897–98 were:

Articles.	Quantity.	Value.
Gold ..... ounces...	6,830	*$124,641
Pearl shell ..... tons...	104	41,210
India rubber ..... do.....	15	17,923
Copra ..... do.....	312	11,801
Sandalwood ..... do.....	304	14,307
Bêche de mer ..... do.....	37	16,522
Other articles	.....	16,235
Total	.....	242,639

*In computing the value of gold exported, the ounce was reckoned at $18.25.

The largest item of export was gold, but the amount of this article as entered at the custom-house does not nearly represent the quantity that was actually taken away.

Commerce of the Gold Coast.—The following information upon the commercial resources of the Gold Coast is taken from the Revue du Commerce Extérieur, Paris, June 19, 1899:

Cape Coast is an important seaport about 70 miles distant from Akkra, with which it is connected by telegraph. It is the chief business center of the colony, being in direct communication with the interior districts, which are rich in gold beds, mahogany, and cedar woods. Axim, 81 miles up the coast, is another shipping port for precious woods. English, French, and German steamers touch here. The greater part of the gold mines of the colony have been already conceded to companies. Agriculture is well developed; there are a number of coffee plantations bearing, while the exportation of rubber has acquired a certain importance. In the first three months of 1898, 1,250 tons were exported. The imports are chiefly cotton cloths, haberdashery, gin, flints, powder, salt, bars of lead, copper rods, and candles.

Nicaraguan Trade in 1898.—According to a British Foreign Office report, the total imports into Nicaragua for the year 1898, including produce brought from other Central American states, amounted to $2,789,653. Compared with the year 1897, this shows an increase of 8½ per cent. Great Britain continues first as the largest contributor, with 41½ per cent of the total imports. The United States comes second, with a total of $680,823, or about 24½ per cent. Germany makes a good third, with 10 per cent, and France follows with 8 per cent of the total imports. Other European countries have not quite 7 per cent, and the Central American states come last, with a little over 1 per cent of the total importations. The report continues:

The increase in trade with the United States is due to larger quantities of provisions and such articles as petroleum, wire, lamps, lanterns, sewing machines, beer, rope, drugs, and hardware generally. American barbed wire is preferred to

the English, being more pliable and less likely to break, though the English wire costs a fraction less. Of cheap cotton goods, 75 per cent come from Great Britain; there is no competition of any consequence. Of heavier goods, such as ducks, drills, sheetings, greys, etc., the United States produces as cheap and as good an article, though not so advantageous on account of the awkward widths and set assortment of pieces and patterns, which American firms say they can not alter. The trade with Germany has remained about the same. All china and glass ware is imported from Germany. The trade in beer is about equally divided between Germany and the United States.

In regard to English and German articles, Germany may be said to have the preference simply through cheapness, or, perhaps, more correctly speaking, through offering inferior quality of a similar appearance, but at a lower price than the English goods. In a country like this, the question of price in buying an article is of supreme importance, and if an enameled saucepan of low quality, lasting, we will say, for six months, can be bought at a fraction lower than a really good one that would last five times as long, in nine cases out of ten the cheaper one sells in preference.

The total exports from Nicaragua to all countries for the year 1898 amounted to $3,098,549, an increase of a little over 4 per cent, compared with the figures for 1897. Coffee is the principal export. Of the total amount shipped—viz, 120,000 bags—about 70 per cent were sent to Germany, 20 per cent to Great Britain, and the other 10 per cent may be divided between France, Italy, and the United States. Other exports are rubber, hides, deerskins, dyewoods, cedar, mahogany, cattle, sugar, and gold.

Of the total exports, Great Britain received 30 per cent; Germany, 27½ per cent; the United States, 27 per cent; France, 3½ per cent; other European countries, 4½ per cent; and Central American states, 6¾ per cent.

CONTENTS.

		Page.
I.—Hosiery and Knit Underwear in Europe		349
(England, 349—Germany, 357—France, 366.)		
II.—Kid Gloves and Kid Skins	*Anderson*	367
III.—Pawnbroking in Germany	*Barnes*	371
IV.—Electric Plants in Germany	*Monaghan*	376
V.—Growth of German Industries	*Monaghan*	377
VI.—Trade and Labor in Germany	*Hanauer*	379
VII.—American Coal in Southern Germany	*Hanauer*	381
VIII.—Petroleum in Hamburg in 1898	*Pitcairn*	382
IX.—British-German Trade	*Guenther*	383
X.—Westinghouse Works in Great Britain	*Halstead*	384
XI.—American Machinery in the United Kingdom	*Fleming*	385
XII.—Russian Cattle for England	*Heenan*	389
XIII.—Construction of Streets and Buildings in Breslau	*Erdman*	390
XIV.—German Prize for Beet-Lifting Machine	*Diederich*	392
XV.—The German Beet-Sugar Campaign of 1898–99	*Diederich*	393
XVI.—Roadside Fruit in Europe	*Brunot*	395
XVII.—Street-Car Strike in Nantes	*Brittain*	396
XVIII.—Electric Railway in Bordeaux	*Tourgée*	398
XIX.—New Use for American Dried Apples in France	*Tourgée*	398
XX.—American Wheat for the Manufacture of Macaroni		400
XXI.—Trade Opportunities in Russia	*Monaghan*	401
XXII.—German and French Trade in Russia	*Monaghan*	403
XXIII.—Westinghouse Air Brakes on Russian Railways	*Holloway*	404
XXIV.—Russia's Acreage in Beets in 1899	*Heydecker*	408
XXV.—Russian Taxes on Trade and Commercial Travelers	*Tower*	409
XXVI.—Work on Siberian Railway	*Hagerman*	409
XXVII.—Resources of Asiatic Russia	*Monaghan*	411
XXVIII.—Trade Regulations at Talienwan: New Siberian City		412
XXIX.—Iron Bedsteads for the Orient	*Davidson*	413
XXX.—Camphor Monopoly in Formosa	*Gowey*	415
XXXI.—Freight Facilities from Atlantic Ports to China	*Goodnow*	416
XXXII.—Motor Vehicles in Shanghai	*Goodnow*	417
XXXIII.—American Trade Interests in Hongkong	*Wildman*	418
XXXIV.—Treatment of Foreigners in Formosa	*Buck*	421
XXXV.—Regulations Relating to Foreigners in Japan	*Buck*	423

		Page.
XXXVI.—Tobacco Monopoly in Japan	*Gowey*	431
XXXVII.—Mining Bubble in Dutch India	*Everett*	433
XXXVIII.—Railway Bridges in India	*Patterson*	435
XXXIX.—Trade of Calcutta	*Patterson*	436
XL.—American Agricultural Implements in New South Wales, *Bell*		438
XLI.—American Steam Plows in Hawaii	*Haywood*	441
XLII.—American Trade Opportunities in South Africa	*Stowe*	442
XLIII.—Diamond Production of the Transvaal	*Macrum*	444
XLIV.—Increase of Duties in the Transvaal: South African Trade Notes	*Stowe*	445
XLV.—Pumps in Cape Colony	*Stowe*	446
XLVI.—Life Insurance in Cape Colony	*Stowe*	448
XLVII.—Samples of United States Goods Wanted in Syria	*Ravndal*	448
XLVIII.—Ivory Market at Antwerp	*Lincoln*	452
XLIX.—Olive Oil in Syria	*Ravndal*	450
L.—Collection of Debts in the Netherlands	*Listoe*	453
LI.—Collection of Debts in Hungary	*Chester*	455
LII.—Collection of Debts in Greece	*McGinley*	456
LIII.—Collection of Debts in Jamaica	*Dent*	457
LIV.—Collection of Debts in Salvador	*Jenkins*	458
LV.—Collection of Debts in Paraguay	*Ruffin*	459
LVI.—Cotton Textiles in Paraguay	*Ruffin*	460
LVII.—United States Capital in Venezuela	*Ellsworth*	463
LVIII.—Venezuelan Law on Foreign Corporations	*Plumacher*	465
LIX.—Proposed Steamship Line for Argentina		466
LX.—Proposed Railroad in British Honduras	*Avery*	468
LXI.—Montevideo Port Works	*Finch*	470
LXII.—Shipments to Chile	*Covert*	473
LXIII.—Venezuelan Consular Fees	*Plumacher*	474
LXIV.—Cultivation of Henequen in Venezuela	*Plumacher*	476
LXV.—Guatemalan Duties on Cattle and Tobacco	*Beaupré*	476
LXVI.—Vegetable Ivory in Ecuador	*De Leon*	477
LXVII.—Hurricane in Guadeloupe	*Aymé*	478
LXVIII.—Misrepresentations Regarding Jamaica	*Springer*	479
LXIX.—Emeralds in Colombia	*Hart*	480
LXX.—Mining and Agriculture in the Yukon Territory	*McCook*	481
LXXI.—Canadian Mining Project	*Brush*	483
LXXII.—Mica in Ontario	*Twitchell*	485
LXXIII.—New Railroad and Mining Enterprise in Ontario	*Shotts*	486
LXXIV.—Peat in Ontario	*Seyfert*	487
LXXV.—Notes (South African Trade Notes—Gold Output of Transvaal, July, 1899—German Interests in the Transvaal—Fruit Trees in South Africa—Flour in Madagascar—Silk and Tea in China—		

Page.

T'ung Oil in China—American Piece Goods in China—Soda Nitrate in Chile—Foreign Loans in Colombia—French Wheat Crop of 1899—British Harvest—Steel-Plate Roadway in Great Britain—Precautions Against the Plague in Russia—Postal Shipments to Russia—Emigration of Jews to Palestine—Congress of Medicine in Paris—Medical Congress at Brussels—Trusts in Germany—German Printing Paper—Germany's Meat Imports—A Suggestion to Exporters—Faulty Packing of American Goods—Tuberculosis Among Belgian Cattle—Transportation of Live Animals in Belgium—Belgian Vehicle Regulations—Belgian Treatise on Flax Disease—Belgian Enterprise in Egypt—Newspaper Reports Regarding Jamaica—Mining in the Yukon Region—Telegraph to Dawson—Money-Order Department in Dawson City—Petroleum and Naphtha in Canada—Canadian Railway Enterprise—Inspection of Forestry in Canada—Agricultural Conditions in Ontario—British Trade Reports from South America—United States vs. German Trade in Argentina—Water Famine in Maracaibo—Cocoanuts in Honduras—German-Guatemalan Trade-Mark Convention—Proposed Steamship Line from Spain to Peru—Antwerp-San Francisco Steamship Service—New Steamship Line to Antwerp—Wages for Children in Germany—Russian-Siamese Commercial Treaty—Greek Quarantine Regulations—Tobacco in Spain—Textile Plants in Russia—Proposed Protection of Danish Agriculture—Walnut Crop of Italy—Duty on Collodion in the Netherlands—Tolls in Belgium—Belgian Demand for Refrigerators—Belgian Taxes on Automobiles—Tin in the Straits Settlements—Consular Reports Transmitted to Other Departments) 489

LXXVI.—FOREIGN REPORTS AND PUBLICATIONS (French View of the Franco-American Treaty—Colonial College in Germany—Trade of the Transvaal in 1898—Trade of Tonga in 1898—Manufacture of Tiles from Slag—Improvements at Tsintau)..... 512

REPORTS BY COUNTRIES.

	Page.
AFRICA, SOUTH:	
American trade opportunities in	442
Fruit trees in	490
Trade notes	445, 489
ARGENTINE REPUBLIC:	
Proposed steamship for	466
United States vs. German trade in	507
BELGIUM:	
Antwerp-San Francisco steamship service	508
Demand for refrigerators in	511
Ivory market at Antwerp	452
Medical congress at Brussels	498
New steamship line between Antwerp and Portland, Me	508
Taxes on automobiles in	511
Tolls in	510
Transportation of live animals in	501
Treatise on flax disease	502
Tuberculosis among cattle of	500
Vehicle regulations in	501
CANADA:	
Agricultural conditions in Ontario	506
Inspection of forestry in	505
Mica in Ontario	485
Mining and agriculture in the Yukon territory	481
Mining in the Yukon region	503
Mining project in	483
Money-order department in Dawson City	504
New railroad and mining enterprise in Ontario	486
Peat in Ontario	487
Peptroleum and naphtha in	504
Railway enterprise in	505
Telegraph to Dawson City	504
CAPE COLONY:	
Life insurance in	448
Pumps in	446
CHILE:	
Shipments to	473
Soda nitrate in	493
CHINA:	
American piece goods in China	493
American trade interests in Hongkong	418
Freight facilities from Atlantic ports to	416
Iron bedsteads for	413
Motor vehicles in Shanghai	417

	Page.
CHINA—Continued.	
Silk and tea in	491
Trade regulations at Talienwan	412
T'ung oil in	492
COLOMBIA:	
Emeralds in	480
Foreign loan in	493
DENMARK:	
Proposed protection of agriculture in	510
ECUADOR:	
Vegetable ivory in	477
EGYPT:	
Belgian enterprise in	502
ENGLAND:	
Hosiery and knit underwear in Nottingham	349
Russian cattle for	389
EUROPE:	
Roadside fruit in	395
FORMOSA:	
Camphor monopoly in	415
Treatment of foreigners in	421
FRANCE:	
A suggestion to exporters	499
Congress of medicine in Paris	497
Electric railway in Bordeaux	398
Hosiery and knit underwear in Roubaix	366
Hosiery and knit underwear in Troyes	367
Kid gloves and kid skins	367
New use for American dried apples in	398
Street-car strike in Nantes	396
Wheat crop of 1899	494
GERMANY:	
American coal in southern	381
Beet-sugar campaign of 1898–99	393
British-German trade	383
Construction of streets and buildings in Breslau	390
Electric plants in	376
Hosiery and knit underwear in Chemnitz	357
Meat imports of	499
Industries, growth of	377
Pawnbroking in	371
Petroleum in Hamburg in 1898	382
Printing paper of	498
Prize for beet-lifting machine	392
Trade and labor in	379
Trade-mark convention with Guatemala	507
Trusts in	498
Wages for children in	508
GREAT BRITAIN:	
Harvest of	494
Steel-plate roadway in	495
Westinghouse works in	384

	Page.
GREECE:	
Collection of debts in	456
Quarantine regulations in	509
GUADELOUPE:	
Hurricane in	478
GUATEMALA:	
Duties on cattle and tobacco in	476
Trade-mark convention with Germany	507
HAWAII:	
American steam plows in	441
HONDURAS:	
Cocoanuts in	507
HONDURAS, BRITISH:	
Proposed railroad in	468
HUNGARY:	
Collection of debts in	455
INDIA:	
Railway bridges in	435
Trade of Calcutta	436
INDIA, DUTCH:	
Mining bubble in	433
ITALY:	
Faulty packing of American goods	500
Walnut crop of	510
JAMAICA:	
Collection of debts in	457
Misrepresentations regarding	479
Newspaper reports regarding	503
JAPAN:	
Iron bedsteads for	413
Regulations relating to foreigners in	423
Tobacco monopoly in	431
MADAGASCAR:	
Flour in	491
NETHERLANDS:	
Collection of debts in the	453
Duty on collodion in the	510
NEW SOUTH WALES:	
American agricultural implements in	438
PALESTINE:	
Emigration of Jews to	496
PARAGUAY:	
Collection of debts in	459
Cotton textiles in	460
PERU:	
Proposed steamship line to Spain	508
RUSSIA:	
Acreage in beets in 1899	408
Commercial treaty with Siam	509
German and French trade in	403
Postal shipments to	496
Precautions against the plague in	495
Resources of Asiatic	411

RUSSIA—Continued. Page.
Taxes on trade and commercial travelers..... 409
Textile plants in..... 510
Trade opportunities in..... 401
Westinghouse air brakes on railways in..... 404
SALVADOR:
Collection of debts in..... 458
SIAM:
Commercial treaty with Russia..... 509
SIBERIA:
New Siberian city..... 412
Work on railway of..... 409
SOUTH AMERICA:
British trade reports..... 506
SPAIN:
Proposed steamship line to Peru..... 508
Tobacco in..... 509
STRAITS SETTLEMENTS:
Tin in the..... 511
SYRIA:
Olive oil in..... 450
Samples of United States goods wanted in..... 448
TRANSVAAL:
Diamond production of the..... 444
German interests in the..... 490
Gold output of, July, 1899..... 489
Increase of duties in the..... 445
UNITED KINGDOM:
American machinery in the..... 385
UNITED STATES:
Antwerp-San Francisco steamship service..... 508
New steamship line between Antwerp and Portland, Me..... 508
URUGUAY:
Montevideo port works..... 470
VENEZUELA:
Consular fees..... 474
Cultivation of henequen in..... 476
Law on foreign corporations in..... 465
United States capital in..... 463
Water famine in Maracaibo..... 507

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

The fact that the market exchange value of foreign coins differs in many instances from that given by the United States Treasury has been repeatedly called to the attention of the Bureau of Foreign Commerce. An explanation of the basis of the quarterly valuations was asked from the United States Director of the Mint, and under date of February 7, 1898, Mr. R. E. Preston makes the following statement:

"When a country has the single gold standard, the value of its standard coins is estimated to be that of the number of grains fine of gold in them, 480 grains being reckoned equivalent to $20.67 in United States gold, and a smaller number of grains in proportion. When a country has the double standard, but keeps its full legal-tender silver coins at par with gold, the coins of both gold and silver are calculated on the basis of the gold value.

"The value of the standard coins of countries with the single silver standard is calculated to be that of the average market value of the pure metal they contained during the three months preceding the date of the proclamation of their value in United States gold by the Secretary of the Treasury. The value of the gold coins of silver-standard countries is calculated at that of the pure gold they contain, just as if they had the single gold standard.

"These valuations are used in estimating the values of all foreign merchandise exported to the United States. The value of the Indian rupee, although calculated according to law at the value of the pure metal contained therein, has a commercial value above the value of the silver bullion; consequently the value for customs purposes is determined in each case by the consular certificates attached to the invoice of exports from that country to the United States."

The following statements, running from January 1, 1874, to October 1, 1899, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account

that the ruble of Russia, for instance, fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, 1882, and 1891–95 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	do	Dollar	1.00	
British Honduras	do	do	1.00	
Chile	do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica	do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	do	.92,6	Gold—doubloon ($5.01,7); silver—peso (60 cents).
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt	do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland	do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain	do	Pound sterling	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece	Gold and silver..	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	do	Gourde	.96,5	Silver—gourde.
Italy	do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡	Gold	Yen	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	do	Dollar	1.00	
Netherlands§	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal	do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖	do	Ruble	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain	Gold and silver..	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Uruguay	Gold	Peso	1.03,4	Gold—peso: silver—peso and divisions.
Venezuela	Gold and silver..	Bolivar	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed.

† The gold standard was adopted October 1, 1892. (See CONSULAR REPORTS No. 147, p. 623.) Values are still, however, frequently expressed in the florin or gulden, which is worth 2 crowns or 40.6 cents.

‡ Gold standard adopted October 1, 1897. (See CONSULAR REPORTS No. 201, p. 259.)

§ See note to table of fluctuating currencies.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896–97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6		
China	Silver	Haikwan tael	1.61	1.61				
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).			4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7		
	Silver						.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2		
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso				.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen			.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1896.				1897.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3	$0.41,2
Central America.	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3	.41,2
China	Amoy tael				.79,3	.76,7	.75,7	.71,7	.66,4
	Canton tael				.79	.76,5	.75,5	.71,5	.66,4
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6	.63,7
	Chinkiang tael				.77,4	.74,9	.73,9	.70	.65,1
	Fuchau tael				.73,3	.70,9	.70	.66,3	.61,6
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1	.67,8
	Hankau tael				.74,2	.71,7	.70,8	.67,1	.62,3
	Ningpo tael				.76,2	.73,7	.72,8	.68,9	.64
	Niuchwang tael				.74,3	.71,9	.71	.67,2	.62,5
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5	.60,8
	Swatow tael				.73,2	.70,8	.69,9	.66,2	.61,5
	Takao tael				.79,8	.77,2	.76,2	.72,2	.67
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5	.64,6
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Ecuador	do.	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1	.19,6
Japan	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5		
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2	.44,6
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2	.07,6
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Russia	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4		
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2				

Countries.	Monetary unit.	1898.				1899.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.42,4	$0.40,9	$0.41,8	$0.43,6	$0.43,9	$0.43,4	$0.44,3	$0.43,6
Central America.	Silver peso	.41,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
China	Amoy tael	.68,5	.66,2	.67,6	.70,6	.71	.70,2	.71,6	.70,5
	Canton tael	.68,3	.66	.67,4	.70,4	.70,8	.70	.71,4	.70,3
	Chefoo tael	.65,5	.63,3	.64,6	.67,5	.67,9	.67,2	.68,4	.67,4
	Chinkiang tael	.66,9	.64,6	.66	.69	.69,3	.68,6	.69,9	.68,9
	Fuchau tael	.63,4	.61,2	.62,5	.65,3	.65,6	.65	.66,2	.65,2
	Haikwan tael	.69,7	.67,3	.68,8	.71,8	.72,2	.71,4	.72,8	.71,8
	Hankau tael	.64,1	.61,9	.63,2	.66	.66,4	.65,7	.67	.66
	Ningpo tael	.64,3	.63	.65	.67,9	.68,2	.67,5	.68,8	.67,8
	Niuchwang tael	.65,9	.62	.63,4	.66,2	.66,5	.65,9	.67,1	.66,1
	Shanghai tael	.62,6	.60,4	.61,7	.64,5	.64,8	.64,1	.65,4	.64,4
	Swatow tael	.63,3	.61,1	.62,4	.65,2	.65,5	.64,9	.66,1	.65,1
	Takao tael	.66	.66,6	.68	.71	.71,4	.70,7	.72	.71
	Tientsin tael	.66,4	.64,1	.65,5	.68,4	.68,8	.68	.69,4	.68,3
Colombia	Silver peso	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
Ecuador	do.	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
India *	Silver rupee	.20,1	.19,1	.19,9	.20,7	.20,8	.20,6	.21	.20,7
Mexico	Silver dollar	.46	.44,4	.45,4	.47,4	.47,7	.47,2	.48,1	.47,4
Persia	Silver kran	.07,8	.07,5	.07,7	.08	.08,1	.08	.08,2	.08
Peru	Silver sol	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6

* The commercial value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.32 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Kwan	Japan	8.28 pounds.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1403 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.9141117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.
Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

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HOSIERY AND KNIT UNDERWEAR IN EUROPE.

At the request of a New York manufacturer,* a Department circular was sent, under date of May 27, 1899, to certain consular officers in England, France, and Germany instructing them to furnish information in regard to the knitting industries in their respective districts. The answers received follow.

ENGLAND.

NOTTINGHAM.

MACHINERY IN USE AND RECENT IMPOVEMENTS.

Since the introduction, in 1891, of the Scott & Williams patent seamless machine, an American invention for making circular seamless socks and stockings, the exclusive manufacture of which in this country was contracted for by George Blackburn & Sons, Limited, of this city, and the exclusive use of which in this district was confined to one firm for a number of years (but which, with improvements, has since been in general use), nothing in the nature of revolutionizing processes has appeared, unless the overlock stitching device patented by Willcox & Gibbs, of Providence, R. I.—an invention which has greatly improved the circular trade—and the Millar loom, both of which are referred to elsewhere, could be so classed. Progress by way of improvement, however, and the application of ideas to new uses, all tending toward economy of operation and increased output at minimum cost, has been great. Another machine (patented, I believe, by American inventors) for making striped seamless socks and stockings—a result not hitherto

* To whom Advance Sheets of these reports have been sent.

obtainable—is being introduced. In reviewing machinery conditions, Secretary Whitehead, of George Blackburn & Sons, Limited, spoke very freely. As he is probably the best English authority on English machinery, his statement is given practically in full:

Prior to 1891, the best classes of goods (socks and stockings) were made upon Cotton's straight, full-fashioning machine, which makes the goods in flat pieces, afterwards seamed to assume the tubular form. In 1891, we entered into an agreement with Messrs. Scott & Williams, Philadelphia, Pa., for a license for the sole manufacture in this country of their patent seamless machines. Up to this time, the only seamless stockings and socks manufactured in this country were made on machines of the Griswold type, which had to be worked by hand, requiring a girl to work each machine; consequently, production was slow, and only coarse-gauge goods were turned out. The Scott & Williams patent seamless machine produced a new article, which the trade took to very slowly and reluctantly, but it gradually got upon the market, and the public soon found out the comfort of wearing seamless goods. The demand for seamless machines rapidly increased, and other American patented machines of a similar class were introduced here. This had the effect of greatly decreasing the demand for full-fashioned seamed hosiery, and such machines fell out of use, except for the very best class of goods and for striped hosiery, which can not be made on the seamless machines. Seamless machines are now more extensively used than ever. Cotton's straight full-fashioning machine has gradually been improved to make the French foot, the Niantic or seamless foot, and stripes of a great number of colors; also, to make fancy open work or lace hosiery; also for making pants (drawers), shirts, combinations, etc. Since the last United States tariff came into operation, a growing demand for these machines has sprung up in that country, and many of the leading manufacturers are putting down this class of machinery. Cotton's straight full-fashioned machine and the straight rib-top machine—for rib tops of socks, ribbed cuffs of sleeves, ribbed bottoms of pants, (drawers) legs, glove fabrics, etc.—are the machines of our build which are most required in your American market. Of the latter, we ship a large number to some of the best manufacturers in the Boston district. Our steam press is also much used in the United States. Of late years, underwear of natural wool has come into great demand, and by the use of the improved sewing machines, such as the Willcox & Gibbs overlock machines, which are made by Messrs. Brown & Sharp, of Providence, R. I., these goods are largely made out of tubular fabric, on circular machines, such as our circular shirt body and sleeve and web machines; but machines for similar purposes are made in America, and consequently there is not much opening for our apparatus of this class. Another machine we are building, invented in America, is the Millar loom—a machine having a warp, weft, and knitting threads, of very rapid production, producing cloth for men's clothing, etc., such as is made on looms in Yorkshire. It also makes blankets. A plant of these machines has been built and is just commencing to be worked in Leeds. If successful, it will revolutionize the weaving trade in woolen goods.

Referring to German competition in machinery manufacture, Mr. Whitehead said:

Unfortunately for us, builders of these (Cotton's) machines here are not able to compete in price with the German builders of similar machines, owing principally to the lower wages paid and the longer hours worked in German machine shops, wages being 30 to 40 per cent higher in our works than in Germany. There are a few of these machines shipped from this country to the United States, but the greater number is bought from Germany.

The introduction of a multiplicity of minor improvements has shortened the usefulness of many older machines, and replacements seem to be necessary almost constantly. Nearly all of the machinery in use in this district is of local manufacture, either from English or foreign patterns. Of the machines in most general use may be mentioned Cotton's, which was first introduced in 1866, for making fashioned hosiery in cotton, wool, worsted, or silk, and the principal English patent upon which has expired. Its productive capacity has been increased and many improvements added from time to time, upon which patents still hold, and it is now built in any desired gauge from sixteen needles in 3 inches, or 8 gauge, to seventy-eight needles in 3 inches, 39 gauge. Then there are the Scott & Williams and other similar seamless machines. Among other modern machines in use (all manufactured here) are: Pants (drawers) machine, in various widths, from which a number of pairs can be turned out, from the smallest to the largest; machines for hose, half hose, and socks, with apparatus for making the instep, finishing off the toe, splicing or thickening the heels, using various colors of yarn, etc.; machines for producing the bottoms or soles of hose separately, and also the instep; straight rib-top machines for making tops for the socks, cuffs, and ankles produced on straight-fashioning machines; circular stocking machines, for producing a tubular web, afterwards cut into suitable lengths for stockings; circular sleeve machines, circular body machines, and circular web machines for making both the bodies and sleeves of undershirts, etc. In the form of auxiliary appliances are produced stitching machines; circular latch-needle machines, for plain-ribbed, mock-seam, and striped goods; steam presses; winding frames; hose-rolling machines; hose-cutting machines; wheel-brushing machines; turning off and seaming machines; welling machines; and other accessories of hosiery manufacture. The overlock stitching device of Willcox & Gibbs has had a phenomenal success since the date of its introduction, about four years ago. Besides a general agency here, continental agencies are maintained and traveling representatives cover the field. At present, some eight or more different types of this machine are in use, for application not only to hosiery, but to the edging of lace curtains and a number of specialties. The keen competition among manufacturers has necessitated its use, both as a matter of economy and to improve the character of output for a discriminating market. Another improvement made by the same firm in Providence has been on the market here for only three months, and is rapidly becoming an equal necessity to the progressive and successful manufacturer. This is an ordinary—or rather extraordinary—lock-stitch sewing machine, applicable to hosiery and similar manufactures. It is driven by power at double the speed of any machine

in use hitherto, and reaches a working speed of four thousand stitches a minute, practically doubling the usual product. The importation of these machines is a tribute, not only to American genius of invention, but to the unsurpassed excellence of the American mechanic. A careful review of mechanical improvements in hosiery and related industries discloses that, with the devices of Scott & Williams, Willcox & Gibbs, and the Millar loom, and the adaptation to other uses of the ideas they involve and suggest, the chief development of the past decade must be credited, not to the old home of weaving and knitting, but to the transplanted field of the future—the United States.

CLASS OF HELP, HOURS OF LABOR, RATE OF WAGES.

From the detailed wage statement given below, the class of labor employed in the factories of this city, as well as in the other factories of England, can be accurately gauged. In a general way, it can be stated that the greater proportion of employees consists of girls, their ages running from 13 to about 22 years. British law prohibits the employment of children under 13 years. The trades unions in the manufacturing centers are compactly organized, but the exercise of good judgment and the cultivation of better relations between employers and employees have largely eliminated the strife so conspicuously prevalent a few years ago. Some fourteen years ago, one prominent concern with a manufacturing existence of over a century removed its works to a village a few miles distant. It was not so stated, but can here be correctly asserted, that among the primary causes of removal was the constant friction with trades unionism at that time. In its new location, the firm largely created its own environment and has since operated with perfect independence, with results satisfactory both to the management and to the employees. The hours of labor here are from 6 a. m. to 6 p. m. or from 7 a. m. to 7 p. m., with the usual lunch hours. In a talk with one of the managing directors, he stated that full operatives earned from $10 to $15 per week and minor operatives, from apprentices upward, from $1.25 to $6.25 per week. All work is paid by the piece. This firm's output comprises plain and fancy cotton and merino underclothing for both sexes, women's hose, men's hose and half hose, and a great variety of textile goods. Besides the home trade, it exports chiefly to Europe, Asia, India, the United States, and British colonies throughout the world. Perhaps the smooth operation of this somewhat independent concern can be ascribed to its humane treatment of operatives. About 600 hands, mostly females, are employed. For the women and girls, an iron building, seating two hundred, has been erected, with a view to comfort, recreation, and instruction. Classes are under Government instruction and earn grants on results. There is a similar in-

stitute for men on another site. Out of their wages these operatives voluntarily contribute to private sick clubs and hospitals. In this way, in the past year, over $1,000 were collected.

This instance is given as a somewhat interesting exception. In the average city factory, operating under the strictest of union rules, work is also done entirely by the piece. For females, the hours are from 9 a. m. to 6 p. m.; for males, from 6.30 a. m. to 6 p. m., with one and one-half hours for lunch, or fifty-four hours for five and one-half days, Saturday being a half holiday. The average earnings per week, stated in American money, and carefully obtained from operatives themselves, are:

Labor—male:		
Patent hands, or full-fashioned—		
Pants (drawers), fashioning all but rib tops, ready for female turner-off	$8. 75 to	$12. 50
Shirts, fashioning body and sleeves, ready for female turner-off	8. 75 to	12. 50
Hose, long, fashioning, ready for female seamers	7. 50 to	8. 75
Half hose, men receiving ribs on bars from female runners-on, then putting on frame and fashioning leg, instep, and foot ready for female seamers	7. 50 to	8. 75
Circular-pants (drawers) hands—		
Making leg, seat, and back; garment ready for female cutters	6. 25 to	8. 75
Stitchers	2. 50 to	3. 00
Body-shirt hands	7. 50 to	10. 00
Sleeve hands	6. 25 to	7. 50
Rib-top hands	6. 25 to	8. 75
Labor—female:		
Trousers, shirts, and pants (drawers) hands—		
Cutters-out	3. 75 to	5. 00
Machinists or makers-up (bands, brace loops, and seats)	3. 00 to	3. 50
Buttonholers	2. 50 to	3. 00
Finishers	2. 50 to	3. 00
Cotton-winders	2. 75 to	3. 00
Turners-off	2. 50 to	3. 75
Runners-on	2. 75 to	3. 00
Cutters	3. 00 to	3. 75
Seamers	. 75 to	2. 50
Labor—boy:		
Unclassified, the wages of helpers and apprentices being wholly a matter of arrangement between them and the operatives they serve.		

At present, labor in hosiery as in every other line of manufacture, except a few branches of the lace trade, is exceptionally well employed. As an index to local conditions, the proceedings of a delegate meeting of the National Hosiery Federation, just held at Leicester, this district, with representatives from Nottingham, Heanor, Mansfield, Sutton-in-Ashfield, Loughborough, Ilkeston, and

other places, will be of interest. It was decided to forward a contribution of $15.75 to the national committee on old-age pensions, to enable them to carry on the agitation; to make a grant of $100 to assist the locked-out operatives in America, and $50 to the Austrian weavers. It was resolved to join the National Federation Trades Union, and in view of the good state of trade it was unanimously decided that the executive take the opinion of the branches as to demanding from employers a uniform price for all classes of goods in all districts.

PRICE OF YARN AND PLACE OF PRODUCTION.

Nottingham is the largest consumer of yarns, both cotton and woolen, in England, and Manchester is the greatest selling market. The Australian drought of last year and the unusual disease there and in other colonies among the flocks seem to be chiefly responsible for the rise in woolen yarns, still maintained, which has amounted to about 9d. (18 cents) per pound since September last. By far the greatest bulk of woolen and cotton yarns used here is English spun, coming chiefly from Manchester; but the exact proportion is difficult to estimate. The German yarns are next in favor, costing here, owing to cheaper German labor, approximately the same as similar grades of homespun.

In speaking of the use and comparative merit of English and German yarns and their cost, one manufacturer stated that he would price the best standard English cashmere at 3s. (72.9 cents) per pound and a similar German yarn at 2s. 9½d. (67.9 cents)—a difference in American money of 5 cents per pound in favor of the German yarn. In all respects, save one, he said, the yarns would be identical, the German having a peculiar soft finish that for some reason is not secured by the English spinners. The varying taste of different markets, is, of course, consulted in the choice of yarns.

THE EXPORT TRADE.

Nottingham exports almost every conceivable article in wool, cotton, and silk classed under the expansive trade term of hosiery, which includes underwear of all descriptions, as well as golf, outing, and sporting specialties. Each manufacturing concern seems to have its own peculiar export fields, and these it holds and extends by catering to local demands as to style, price, and quality, extreme care and pride being shown in maintaining its reputation and the reliability of its goods, as well as the inflexibility of its quotations. British exports to Central and South America show a serious decline and continue to be more or less spasmodic, being confined to firms possessing exceptional local advantages acquired perhaps by chance and maintained apparently without that cultivation of the market so

noticeable now in the Far East, in Canada, Australia, and India. For instance, the manager of one firm stated that some years ago there was a steady and active trade with South America, the demand, however, being for the cheaper grades of cut cotton; but that of late, this trade had almost vanished, owing partly to the introduction and growth of local manufacture of the same class—notably at Buenos Ayres, Argentine Republic—but chiefly to the persistent competition of Spanish manufacturers located at Barcelona, Spain, who paid wages with which British competition was impossible, who possessed as a rule favored trade relations with the Spanish-speaking countries of Central and South America, and who were favored by better knowledge of local demands and the intricacies of commercial usage. This view I find to be generally confirmed, although the manager of another house said, substantially:

Our best success there is with fancy goods, which they are unable to make themselves and which are chiefly imported either from Spain, France, or England. They appear to want stripes and color, the more the better, and this applies to cotton as well as to the cheaper silks.

While Central and South American countries nearly all maintain consulates here, their method of exportation involves no consular declaration, and I am unable to furnish statistics of exportation from this district.

Great Britain, in hosiery as in other manufactures, maintains a characteristic and stubborn preference for home products, and furnishes, with her colonies, the greatest developed market for British manufactures. For several years, her exporters have assiduously cultivated the opening Chinese field, and they view with especial alarm the growing success of American goods and methods in that territory. Said a manufacturer prominent in the Chinese trade:

As to German competition, we have no fears. In my own experience I have lost at times a number of Chinese customers through German underbidding, but in each case they have returned voluntarily, giving pretty shrewd trade reasons for doing so. They have an acute trading instinct and must be satisfied that they are not only given bottom prices, but that the goods are exactly as represented. They are quick to detect any variation between samples and invoice; but once gain their confidence, and they are excellent customers in all respects.

Then he inquired, "By the way, are not you Americans making unusual efforts in the Chinese markets?" This last question voices the apprehension felt especially towards American competition, viewed in the light of a decrease of British exports, mainly of woolen and cotton, in 1897, of $6,500,000 to Brazil, $10,000,000 to Argentina, $8,500,000 to China, and $15,000,000 to British India, as compared with enormous American increases.

FINISHING GERMAN GOODS.

The cheapness of German labor at one time resulted in the experiment of importing hosiery and textile bodies, finishing them here, and then marketing the finished product both at home and abroad as "goods made in England." That this practice was profitable may be assumed from the success of the trades unions in securing a law which requires that all goods so marketed or exported be stamped as manufactures of the country whence originally imported. This law, rigidly enforced, coupled with the antagonism of organized labor, seems to have brought the practice into disuse as well as disrepute. While some individual profit may have accrued from such methods, the effect upon English trade as a whole was unhealthy. Foreign purchasers of such goods through English finishers became inquisitive, and many reached the not unnatural decision to trade direct with Germany and save middlemen's profits. Thus the German market, through English effort, was exploited to the detriment of English manufacturers. There are agents, or commission houses, at London and the larger trade centers who fill foreign orders of any description, but if certain German or other goods are included, they are generally shipped direct from place of production.

ENGLISH TRADE WITH THE UNITED STATES.

The greatest educative interest naturally attaches to the hosiery trade of this district with the United States for the past twenty years. Following is a comparison by fiscal years of the exports since July 1, 1877, to the close of the fiscal year June 30, 1899, together with a comparison for the same period of machinery exports:

Year.	Hosiery.	Machinery.
1878	$582,305.40	$1,662.06
1879	643,354.48	3,087.66
1880	847,662.70	12,628.18
1881	1,099,198.17	20,520.63
1882	1,103,521.00	56,129.50
1883	1,619,083.00	52,365.00
1884	1,534,494.84	28,371.67
1885	1,215,055.42	67,545.13
1886	1,374,658.95	78,662.18
1887	1,399,719.49	80,405.68
1888	1,442,264.69	61,297.43
1889	1,365,605.22	86,514.14
1890	1,537,426.97	52,074.30
1891	985,229.93	175,088.09
1892	731,461.31	339,916.49
1893	650,000.55	139,987.36
1894	375,591.88	35,819.08
1895	510,193.91	154,695.51
1896	744,260.59	110,325.97
1897	732,760.61	23,603.59
1898	189,235.13	210,252.01
1899	293,592.28	165,103.10

The machinery item is almost exclusively composed of lace and hosiery machinery. Until six months ago, no separate record was kept in this office as to these items, but for the half year ending June 30, 1899, the exports were: Lace machinery, $52,817.86; hosiery machinery, $18,940.04. These proportions, roughly and approximately, may be said to have obtained for the last decade. Bearing in mind the rapid development and revolutionizing inventions in hosiery manufacture in the United States since 1877, these figures must be of dramatic interest to those engaged in the American industry—the hesitating but gradual increase of machinery imports until the high-water mark of 1892; their relative effect upon hosiery imports during the infancy of home manufacture; the resulting and remarkable decline of hosiery imports until 1894, when they were partially revived by the Wilson-Gorman tariff; the contemporaneous halt in machinery imports during the following period of industrial depression, and the present return to conditions which, notwithstanding the increased consumption caused by an era of national prosperity, indicate very clearly that in the future the United States will dominate its own market, and mark the end of successful foreign competition.

S. C. McFARLAND,

NOTTINGHAM, *July 26, 1899.* *Consul.*

GERMANY.

CHEMNITZ.

MACHINERY.

The apparatus most in use in the manufacture of hosiery is Cotton's rotary machine. This is used to turn off large quantities of goods dyed in the piece and ingrains, mostly 33 and 36 gauges. Only a few 27, 30, and 39 gauges are made on them. In the 33-gauge line, these machines turn off some goods in two, three, and four colors—stripes. Only a few plaids, a few vertical stripes, lace insteps, and a few all-lace goods are run off them. Paget frames are still used for plain goods, but chiefly for what are known to the trade as Richelieus, Rembrandts, Darbies, and Charlotte ribs, in 27, 30, and 33 gauge. These turn off some goods that have three, four, and even five colors—horizontal. They are also used for fancies, plaids, checks, 27 and 33 gauges, vertical zigzags, lace goods, mostly 33 gauge, and silk plaits.

Hand frames are still used for the very fine fancies, elaborate laces, and plaids. For seamless hose, circular frames—the Standard

and Branson—are used, but not exclusively. These are being exported, quite a number having been sold to foreign parts since the Chemnitz Knitting Machine Company began the manufacture of the former (Standard). The best machines for turning off large quantities of cheap goods—the Standard and Electric (the latter is now used widely in Austria, Hungary, and Bohemia)—were invented in the United States. The circular Terrot is still used for a few cut goods. A few patent sock frames are found. There are also rib-top machines on the Cotton and Paget models, and ribing machines modeled after the Cotton and Paget, for fashioned goods. Finally, there are knitting frames for plain and ribbed wear.

During the last twenty or thirty years, the old wooden and iron hand frames or machines have been supplanted by the Paget machines and later by Cotton's rotary machines. These are making now all kinds of goods formerly produced by hand frames. They turn off, as successfully as did ever the hand frames, plain goods, dyed and ingrain, and lace goods. Ribbed and horizontal stripes in two colors are made much more advantageously on what are known as 12, 18, and 24 Cotton's rotary frames—that is, machines that make twelve, eighteen, and twenty-four pieces at once—than was possible in the old way. Jacquard goods, verticals, zigzags, plaids, goods of three, four, and five colors—horizontal stripes—are made much more successfully on Paget or hand frames, the small quantities wanted and the constant changes of threads and patterns making it impossible to utilize a machine producing so many at once as Cotton's rotary. The American machinery for manufacturing seamless hosiery has made the old cut goods, turned off the Terrot circular machines, the 26 and 27 gauge Paget-machine goods, and the patent half hose impossible. Circular knitters and flat knitters with six to twelve heads are forcing manufacturers to sell the old machines to junk men. The tendency is entirely towards fine gauges. Where formerly 26, 27, and 30 gauges prevailed, one finds now 33 and 36 gauge goods; nor are 39 gauges uncommon. Thirty-gauge goods are rapidly disappearing, while 26s and 27s are nearly obsolete.

LABOR.

On Cotton's or Paget's machine and on rib frames of all kinds, male help prevails. On circular, seamless, and knitting machines both males and females are employed. Women are almost exclusively employed in running on, winding, turning off, seaming, welting, mending, trimming, feeding, and boxing. Men do the pressing. In the country, one finds women working on Paget and hand frames and children seaming and boxing.

Men work daily ten hours and twenty minutes, or sixty-one to sixty-three hours a week. Women work nine hours and fifty minutes, or fifty-eight and a half hours a week. Girls and boys under 16 work nine hours and thirty minutes, or fifty-six and a half hours a week. The time stated is that of actual labor, no allowance being made for rests of any kind. I may say most of the mills run from 6 a. m. to 6 p. m. in summer and from 7 a. m. to 7 p. m. in winter, with a half-hour rest (8 to 8.30 to 9), an hour for dinner (12 to 1), and a half hour (vesper) at 4 p. m. These pauses or breaks in the morning and afternoon are believed to be conducive to better health and better work. In the country, where many of the machines are in cottages and much of the work is done in the homes, the hours amount to fifteen or sixteen daily. Where the work is governed by legislation, the hours are as above indicated.

WAGES.

Wages may be ranged under two headings—town wages and country wages. In the town, they average for men on machines from $3.57 to $4.25 a week; in the country, from $2.38 to $4.28. On circular, seamless, or knitting machines, men in the cities get $3.80, women $2.61, per week. Winders (as a rule women) get $2.86 in the cities and $2.38 in the country. Turning-off hands, seamers, and menders are paid $2.14 in city and country; trimmers, $1.90 to $2.86; folders, from $1.43 to $2.14—all per week. There is a tendency just now to pay higher wages. As will be seen, the wages here at the very best are far below those paid in the United States. How far the factor of wages enters into the problem will appear only after exact statistics in regard to production, now being gathered by the Empire, are available. Farther on, the reader will find an attempt to answer the question by estimates of production.

PRODUCTION OF YARNS.

Many of the yarns used are made from American cottons spun in Germany. Some, notably the Macos, are of Egyptian cottons spun here and in Switzerland. Very few, if any, of these come from England. Great Britain supplies nearly all the lisle yarns, Saxony producing very few. Combed cashmeres are spun here; England supplies some for knitting. Merinos come from England. Shoddies are spun here in huge quantities. Italy and France send pure silk and spun silk. Prices are:

		Cents.
Low American cottons, No. 20	per pound	13.3
Medium American, No. 20	do	15.47
Low, combed Egyptians, No. 20	do	16.66
Medium Egyptians, No. 20	do	18.56

		Cents.
Best Egyptians, No. 20	per pound	19.99
Low-grade white cashmere, No. 36 (metric system)	do	55.93
Medium white cashmere, No. 36 (metric system)	do	61.88
Best white cashmere, No. 36 (metric system)	do	69.02

Merinos, shoddies, pure silks, and spun silks are used in so many qualities, mixtures, etc., as to render futile any attempt to get correct figures.

GLOVES.

The so-called Round and Ketten or chain machines are used. These are copies of English machines, and are made in Chemnitz. The German is not only a successful imitator, but a successful originator. Many of England's and America's best machines have been improved upon here.

In the manufacture of gloves very few men are employed, except in offices. The gloves are made by women and girls. The hours of labor are from 6 to 6 in summer and from 7 to 7 in winter, with arrangements exactly like those noted in the hosiery industry.

The wages vary from $1.42 to $4.76 per week.

Woolen yarns sold formerly for 95 cents a pound; the price now is $1.66. Cottons sell for same prices as stated for hosiery.

Besides the United States and England, Saxony's best customers—South and Central America—take large quantities of textile gloves. They take embroidered goods, lisles, silks, half silks, and fancies, generally cut goods; some seamless are now being sent. England takes none in the rough. A few go in a half-prepared state to the United States and are finished there—*i. e.*, the buttons or clasps are sewed on.

The outlook in the glove line is very good; at no time in ten years was it better. Although prices are high, a belief prevails among well-informed parties here that they will be higher. One well-informed manufacturer put 1 mark more per dozen as the point to be reached, before the upward movement reaches its limit.

UNDERWEAR.

The machines in use in this branch are the Paget, Cotton, hand, and circular machines, or frames as they are often called; also Paget and Cotton looping machines. It would be impossible to describe the various changes which these machines have undergone during the last twenty years, as this would involve technicalities known only to the machine builders. The principal improvement is that most machines are now worked either by steam or electric power. Formerly, they were operated exclusively by hand. Both men and women are employed. The hours of labor are from 6 to 12 and from 1 to 7—

say about eleven to twelve hours per day. The average wages are: For men, $3.57; for women, $1.90 to $2.29 per week.

The prices of cotton yarn average 29 cents per kilogram (2.2 pounds); and of woolen and half-woolen yarns, from 71 cents to $1.42 per 2.2 pounds. Both cotton and woolen yarns are almost exclusively made in Germany. So far as can be ascertained, the majority of goods exported to Central and South America consists of circular-cut cotton articles. No German underwear is sent in the rough from this district to England to be finished there for export; possibly, this may be done from the south of Germany or Switzerland. My opinion is that none is sent. Speaking in general of the knit-goods trade in Saxony, I am of opinion that at present it is in a fair condition. For a number of years, there has been an overproduction of goods, and people have had to sell mostly without profit. It appears, however, that manufacturers have become tired of this state of affairs, and there seems to be quite a decrease in the production, which has had a beneficial effect upon prices. If the present conditions continue, there is every prospect of a healthy trade. The demand from the United States has somewhat decreased, but business with the rest of the world seems to be advancing.

THE FUTURE OF THE KNITTING TRADE IN SAXONY.

Hitherto, the fortunes of the hosiery trade in Saxony have been so much dependent on the United States market that the demand of the latter needs most careful consideration. The export to the United States has decreased steadily year by year. This decrease is partly accounted for by the heavy fall in prices, but is chiefly due to the fact that the actual number of dozens sent is less. And yet, strange to say, the mills are to-day scarcely able to fill even the much-reduced demand. The introduction of machinery for seamless hosiery made the Saxon coarse-gauge goods (27 gauge) superfluous. They fell in price till the makers became bankrupt or reduced wages to a point that pushed labor into other lines. This branch is now confined to the manufacture of a small number of fleeced goods, supplying the irregular demand of small markets. The seamless substitute did not take root in Saxony. The American tariff gave no chance of competition to foreign goods made by cheap labor. England, with machines adapted for finishing coarser wool, gained the cashmere seamless trade. Then the large demand of the East, via the Austrian Empire, caused parties to establish in Bohemia, just over the Saxon border, factories for seamless hose and half hose. Thus, Saxony has lost the trade in large quantities of the lowest-grade goods. The next item to which the large Cotton machines

were most extensively applied was the 33-gauge goods. The large quantities of 1–19 stuff, once bought by the United States, were reduced, first, by partial substitution of seamless domestics; second, by the dollar limit of the Dingley bill, which made it useless to import goods costing much under 4.40 marks ($1.04); and third, though not to any great extent, by the introduction in the United States of machinery for full-fashioned goods. The same thing happened as with the coarse-gauge stuff—prices fell and labor was driven into better-paying industries. As a result, no fresh capital was attracted. All but the most advantageous machinery was broken up. The production was reduced, but the quality was so improved that manufacturers find ample employment to-day on better grades—ingrain goods, lisle threads, Richelieus, ribs, split feet; in fact, Chemnitz can not supply enough of these at periods like the present.

What is left of the industry is undoubtedly in a healthier condition than formerly. If the present state holds, an improvement in prices is bound to result, especially as the class of goods made will bring an advance if demanded. The production has shrunk nearly enough to render the industry independent of a further decrease in the United States demand, if a normal development of other markets can be reckoned on. The fact is, Saxony no longer originates the large staple volume of goods, but produces specialities on an extensive scale. The industry here no longer supplies the world; but the coming years promise to be profitable to those who remain in its mills. I may add that its real rival, the one it watches and fears most, is the United States. It is eager to see what success our present efforts to extend our export trade will achieve. Everybody believes we will soon send our last buyer to Saxony's markets. What we have done in iron we are bound to do in textiles. The men with whom I have talked say that much of Saxony's success depends on the carefully trained managers of the mills and makers and repairers of machines; and last, but by no means least, on the skillful men and women who work the machines. Technical education is an important factor in placing this Empire so high among industrial and commercial states. Government aid, in the form of protective tariffs, subsidies to steamship lines, and premiums to sugar producers, has had weight; but the important force rests in the trained leaders, merchants, traveling agents, engineers, mechanics, and laborers.

STATISTICS.

Total exports from Chemnitz to the United States.

Year.	Quarter.				Total.
	First.	Second.	Third.	Fourth.	
1887	$3,439,968.30	$1,946,063.69	$2,310,335.56	$2,459,424.26	$10,155,791.81
1888	2,882,699.87	1,563,905.37	2,016,080.24	2,299,033.07	8,761,718.55
1889	2,821,643.32	1,712,224.62	2,555,329.25	2,816,502.53	9,905,697.72
1890	3,201,032.18	2,822,669.89	2,935,354.02	1,995,403.16	10,954,459.25
1891	3,326,210.21	1,197,056.05	1,579,512.24	1,926,012.84	8,028,791.34
1892	2,188,795.14	1,267,000.00	1,523,739.78	1,802,709.07	6,782,243.99
1893	2,256,974.77	1,501,740.93	1,225,400.90	822,887.22	5,807,003.86
1894	1,498,773.91	828,285.41	1,341,084.18	1,628,676.37	5,296,819.87
1895	2,324,903.97	1,580,841.83	2,002,973.63	1,557,074.00	7,465,793.43
1896	1,903,441.00	1,058,442.00	1,171,875.79	1,026,661.63	5,160,420.42
1897	1,897,982.18	1,871,899.13	519,531.44	946,278.79	5,235,691.54
1898	1,570,817.60	1,251,627.68	519,531.44	1,061,182.40	4,403,359.12
1899	1,430,255.20	948,946.00	.....	.....	2,379,201.20

Exports of underwear to the United States.

Year.	Quarter.			
	First.	Second.	Third.	Fourth.
1887	$18,998.69	$12,600.30	$20,166.35	$25,557.47
1888	64,968.95	22,267.51	23,707.91	36,584.99
1889	57,123.67	17,562.29	27,954.74	25,435.92
1890	69,218.23	33,294.37	33,874.40	32,109.46
1891	47,904.41	8,674.40	27,980.66	14,712.30
1892	40,745.20	19,586.42	31,545.28	31,476.54
1893	48,251.07	37,909.41	62,669.32	8,469.28
1894	32,271.05	37,478.40	6,942.18	17,036.16
1895	59,035.63	38,010.57	71,747.00	72,924.00
1896	56,523.00	19,790.00	44,830.14	17,382.43
1897	52,490,82	44,217.93	10,965.95	14,066.64
1898	24,587.30	25,249.55	49,952.94	28,202.02
1899	43,886.54	30,163.00	.....	.....

Exports of hosiery and gloves.

Period.	Hosiery.			Gloves.		
	Cotton.	Silk.	Wool.	Cotton.	Silk.	Wool.
1887.						
March quarter	$1,776,685.65	$66,683.70	$7,777.89	$189,967.97	$377,897.08	$9,103.24
June quarter	923,694.13	31,147.41	19,072.96	58,488.18	58,621.25	141,838.82
September quarter	885,124.40	39,664.74	51,720.40	40,177.00	21,075.73	224,599.82
December quarter	1,516,857.99	32,917.83	5,665.17	143,401.33	246,841.59	13,300.54
1888.						
March quarter	1,681,310.32	35,544.65	12,492.95	127,649.55	345,028.54	1,871.14
June quarter	847,516.98	22,188.08	31,082.79	49,239.70	24,026.35	136,077.63
September quarter	720,467.29	28,448.01	78,438.93	40,623.32	18,380.04	226,582.55
December quarter	1,379,702.19	39,042.65	15,916.89	150,036.50	184,761.96	16,219.85

Exports of hosiery and gloves—Continued.

Period.	Hosiery.			Gloves.		
	Cotton.	Silk.	Wool.	Cotton.	Silk.	Wool.
1889.						
March quarter	$1,570,189.67	$58,800.63	$11,751.65	$115,529.65	$326,818.81	$4,237.79
June quarter	961,825.87	37,288.67	33,721.64	50,895.33	78,094.97	148,055.96
September quarter	964,970.41	51,624.69	125,567.48	46,319.23	23,570.19	345,450.20
December quarter	1,757,436.09	74,036.73	19,783.92	163,610.76	271,264.94	47,464.91
1890.						
March quarter	1,886,496.42	95,367.94	18,911.48	152,131.28	338,317.05	6,601.49
June quarter	1,494,945.66	54,582.48	61,111.75	103,629.42	48,500.17	286,654.62
September quarter	2,002,423.77	71,705.46	67,199.92	110,569.52	131,597.16	96,792.44
December quarter	1,169,890.12	34,617.73	11,932.97	115,533.45	136,855.82	11,268.32
1891.						
March quarter	1,315,859.24	55,678.76	13,277.53	83,218.82	205,101.05	12,389.64
June quarter	630,236.60	23,005.80	23,634.70	50,484.55	28,336.60	143,139.85
September quarter	753,774.69	29,684.00	51,221.55	36,899.19	22,907.76	151,213.81
December quarter	1,278,348.05	38,870.28	34,906.35	112,035.38	143,562.37	29,748.03
1892.						
March quarter	1,621,044.02	53,302.98	38,180.84	103,864.39	254,005.66	8,646.16
June quarter	840,983.50	36,815.20	23,869.47	66,811.02	51,740.14	154,387.10
September quarter	962,529.96	42,408.87	63,491.24	45,826.72	26,059.67	246,797.66
December quarter	1,306,155.01	36,664.16	15,554.32	154,109.04	164,200.47	39,227.82
1893.						
March quarter	1,573,415.40	64,470.21	19,884.52	179,659.59	293,515.59	6,545.04
June quarter	1,022,961.11	34,210.85	19,484.37	91,232.67	47,142.82	169,071.52
September quarter	816,574.16	24,082.51	35,124.19	50,322.52	19,364.54	161,797.73
December quarter	679,308.37	10,191.71	.....	57,305.71	44,316.24	.....
1894.						
March quarter	1,999,464.26	15,027.98	8,150.74	76,488.89	40,191.09	1,385.14
June quarter	613,021.41	11,135.99	8,110.45	39,374.16	41,415.58	33,308.10
September quarter	1,075,129.53	91,063.94	9,892.58	26,024.69	27,360.04	15,513.76
December quarter	1,355,603.03	18,253.67	14,575.06	64,154.09	77,488.80	31,989.22
1895.						
March quarter	1,796,459.84	24,293.03	51,393.31	97,383.44	219,916.72	6,515.95
June quarter	1,139,799.35	15,927.19	67,843.72	59,237.86	49,592.51	110,255.56
September quarter	1,054,164.75	17,680.00	139,378.00	64,538.16	40,598.96	233,173.42
December quarter	1,108,666.00	19,582.00	38,785.00	51,005.00	71,556.00	39,470.00
1896.						
March quarter	1,457,576.00	20,502.00	28,364.00	88,885.00	138,596.00	134,713.00
June quarter	683,023.00	5,424.00	46,616.00	52,209.00	2,953.00	20,747.00
September quarter	645,701.14	9,197.20	84,060.57	56,421.27	13,731.82	153,029.31
December quarter	836,716.69	5,732.83	10,829.39	30,088.00	19,688.73	11,337.66
1897.						
March quarter	1,508,678.64	13,988.25	45,845.60	77,944.45	67,781.62	34,532.31
June quarter	1,328,063.00	11,340.45	80,898.72	68,654.23	14,248.36	94,942.30
September quarter	532,317.15	9,449.99	15,678.37	15,203.63	3,698.52	3,750.98
December quarter	742,730.65	7,523.38	5,939.04	47,635.11	27,403.08	4,081.41
1898.						
March quarter	1,226,615.11	20,841.66	9,096.84	103,390.53	52,583.72	1,180.48
June quarter	902,201.93	14,912.87	22,322.33	78,658.54	29,213.96	27,148.79
September quarter	726,648.42	10,042.63	57,113.89	75,737.81	12,205.03	97,735.58
December quarter	775,399.38	6,217.37	5,547.32	61,799.32	33,349.99	10,245.86
1899.						
March quarter	1,039,175.57	15,928.97	13,677.34	115,790.66	85,970.81	1,221.97
June quarter	636,602.00	5,103.00	13,868.00	67,373.00	16,249.00	25,081.00

CLASS OF GOODS EXPORTED TO SOUTH AMERICA.

Markets.	Shipped via—	Class of goods from Saxony.
River Plate countries..	Hamburg and Bremen chiefly; a few Paris.	Fashioned, 27, 30, and 33 gauges; same in fashioned lisles; brilliant and dull.
Montevideo	Hamburg; some Paris and Manchester.	Do.
Brazil	Same as River Plate.	Chiefly cotton fashioned; some circular, cut hose and seamless socks.
Venezuela	Hamburg, Bremen, Cologne, Westphalia; a few Paris and Manchester.	Cotton lisles and silk fashioned, chiefly 30 and 33 gauge.
Colombia Bolivia	Same as River Plate	Do.
Peru	Same as River Plate; many from Paris.	Same as Venezuela, with some 36 and 39 gauges added.
Chile	Paris and Manchester	Do.
Panama	Same as River Plate	Do.
Caracas	....do	A good many cheap, cut goods, also low priced, full fashioned.
Guatemala	Chiefly Hamburg	
Mexico	Hamburg, Paris; a few Manchester.	Some cut goods, and same styles as River Plate; no silks.
West Indies	Paris, Barcelona; some Hamburg and Manchester.	30 and 33 gauges, full-fashioned cottons and lisles.
Philippines	....do	

No knit goods in the rough are sent from Saxony or this Empire to England.

The average 33-gauge woman's stocking made from 2–38 cotton yarns, on twelve at once Cotton patent rotary frames, costs:

	Marks.
For winding, in one week, 500 pounds English	11. 25=$2. 68
Making legs, 45 dozen per week	17. 00= 4. 05
Footing, 110 dozen, one man, one week	24. 00= 5. 71
Running on legs on footing machine (footer), 110 dozen in one week..	9. 00= 2. 14
Trimming 175 dozen in one week	9. 50= 2. 26

In addition to the foregoing, it may be interesting to know that one dozen pair hose (ladies' 33 gauge) is made from 2 pounds (English) of yarn; that the wages for winding on a dozen pairs are 4½ pfennigs (1.07 cents). The legs cost, per dozen pair, to make, 9 cents; the feet, 5 cents; the running on costs 10½ pfennigs (about 2.5 cents); the turning off, 9 pfennigs (a trifle more than 2 cents), or a total of 1.13 marks (27 cents)—*i. e.*, in the rough. Finishing is extra. The dyeing costs 70 pfennigs (17 cents) per dozen pairs; the trimming, 6 pfennigs (less than 1.5 cents); the folding, stamping, pressing, etc., about 35 pfennigs (about 8⅓ cents). An exact estimate is impossible.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 26, 1899.*

No. 230——2.

FRANCE.

ROUBAIX.

The export from this consular district of articles mentioned in Department circular is inconsiderable.

Very recently, the press of Roubaix called the attention of French manufacturers to the fact that Americans without distinction of class make wide use of knit underwear, and that America is the finest market in the world for this class of goods.

In the same article, it was stated that the French neglect to make themselves acquainted with tastes and requirements of American consumers, and that the trade has passed entirely into the hands of the English and Germans, the largest exports being from Chemnitz.

It is impossible in this locality, either in Roubaix or Lille, the fifth town of France, to find knit woolen underwear with finished seams. In order to obtain this class of goods, orders must be sent to England or to Paris, where English goods are on sale. The French goods in this district are awkward in fit and roughly finished.

Mr. Dubois Gregorie, United States consular agent at Lille, has sent the following information concerning the manufacture in this district:

The machines employed in Lille, of Tourcoing manufacture, are the same that were in use twelve and fifteen years ago, with slight changes that increase their production. As a rule, women are employed for twisting and winding, and their pay is gauged by the amount of work they can turn off. They earn from 20 to 25 francs ($3.80 to $4.83) weekly.

The prices of yarn vary widely, depending entirely on the use that is to be made of it, there being different prices for bobbins, balls, and skeins. The color and quality also affect the price. When the purchaser demands a very low priced article, the yarns are filled with inferior short qualities.

Very little is manufactured either for the United States or South America, the charges for shipping, insurance, etc., being regarded as too onerous.

Only skein thread is manufactured, in insignificant quantities; England buys good qualities in skeins and balls. Three-fourths of the English purchases, however, are of écru bobbin thread of superior quality, the price varying from 3.50 francs to 5.50 francs per kilogram (67 cents to $1.06 per 2.2 pounds). It is wound on spools in England and sold with English marks, as of English manufacture.

W. P. ATWELL,

ROUBAIX, *July 18, 1899.* *Consul.*

TROYES.

Consul Prickitt, of Rheims, under date of August 15, 1899, transmits the following report from Mr. Gaston Baltet, the consular agent at Troyes:

For making ribbed goods, the Bordiret & Parigot machines, manufactured at Troyes, and Cotton's patent perfected, made at Chemnitz, Germany, and also at Troyes, are used.

The circular machines are constructed by the firm of Lebocey & Co., of Troyes.

The Société Générale de Bonneterie is said to make the finest goods in the city. By the term "bonneterie" is meant all kinds of underwear and hosiery.

Men, women, and children are employed. The hours of labor are about eleven a day. Men receive 5 francs (96 cents); women, 3 francs (57 cents); and children, 2 francs (38 cents) per day.

The price of yarn varies from 1.50 to 8 francs (29 cents to $1.54) per kilogram (2.2 pounds). It is produced mainly at Lille, France.

The goods exported to Central and South America are about the same as those sent to the United States, to wit, undershirts, drawers, stockings, and socks.

The firms at Troyes sending bonneterie to the United States are: Etablissements Manchaufée, Société Générale de Bonneterie, P. Raquet & R. Vignes, and Wilson Brothers. The American correspondents are, respectively, H. Jaquin, Spichman & Co., A. Kitz, and Wilson Brothers, all of New York City. By calling upon these correspondents, anyone can see the kinds of goods made at Troyes.

I see no reason why knit underwear and hosiery should not be made in the United States as well as in France or Germany. The machines and the material can be readily purchased. Those interested should send skilled representatives to the manufacturing cities of Europe to investigate this industry. One not in the business can not describe the complicated machinery, or report very intelligently upon the subject.

KID GLOVES AND KID SKINS.

KID GLOVES.

The kid-glove industry of Grenoble is of ancient and doubtful origin. The town itself is situated in the center of the finest kid-skin region in France, and is surrounded by mountains where the cheap labor of the peasant women can be economically employed in hand sewing. Several centuries ago, Grenoble won a well-deserved

reputation for the quality of its gloves. The actual quantity of gloves manufactured was small in comparison with the output of to-day, but we find that in 1691 the glove corporation of Grenoble was organized and founded, and that ever since that time records have been kept which testify to its importance.

Since the invention of the sewing machine this industry has been gradually decentralized, and kid gloves are now made in almost every country of the civilized world. Commercial competition—notably in Belgium, Germany, England, Italy, and Austria—following close upon the heels of this invention, has been perhaps the chief reason why Grenoble has lost its preeminence in this branch of manufactures. It may justly be said, however, that Grenoble always has been and is still the center of the kid-glove industry, especially for the finer qualities of gloves.

This industry may be conveniently divided into four main branches or departments, viz: (1) The raw-skin business; (2) the dressing or alum-tanning process; (3) the dyeing or staining process; (4) the actual glove making—*i. e.*, the stretching and thinning down of the skin to its proper size and thickness, the cutting out into the shape and size required, the sewing together of the different parts, and the embroidering.

KID SKINS.

The quality of the skin is best judged after the tanning and dyeing process is complete, and may be said to be based on the strength, softness, and pliability of the leather, and on the size of the skin, the fineness of the grain, and its freedom from defects, which are mainly caused by scars or diseases. These qualities of the raw skin depend on the care given to the young kid, on its breed, on the nature and abundance of its food, and on climatic influences.

The finest kid skins are undoubtedly to be found in France, but this does not mean that French skins are uniform in quality. For instance, in the departments of Savoy and Upper Savoy, the skins, as a rule, are large and heavy, with a fine grain for the size; they are soft and elastic, and at the same time strong and well suited for men's gloves. The rich pasturage of this country is an important element in the superior quality of these skins as a class.

In the region of the Vosges, in the northeastern part of France, kid skins are much smaller and less elastic, owing to the fact that the animals are not so well cared for. Here, the poverty of the soil is one of the reasons for the inferiority of the skins. To the west of the Vosges, on the line between Paris and Lyons, the kid skins are of a better quality. Still farther west, towards the center of France, in Touraine and Poitou, where the pasturage is good and the animals well cared for, the grain of the skin is fine, the skin itself is thin and

strong, and comparatively free from scars and disease. Farther south, towards the Spanish frontier, the quality of the skin is inferior as a rule, the poorer pasturage and hotter climate having a marked effect upon it. The peasants in this part of France are careless in their methods of work. They neglect the kids while alive and after they have been butchered take the skins off carelessly, and prepare them for market in a slovenly manner. At least one-third of these skins are so dry that they are fit to be used only as linings for boots and shoes. Kid skins have the same general characteristics throughout the southwest of France—that is, from the Rhone to the Spanish border and the Bay of Biscay.

Kid skins generally pass through several hands before reaching the glove maker or his agent. The skins of kids which are bought by the butchers in the towns and used as a substitute for lambskins are sold to the skin merchants or their agents. The skins of kids which are butchered by the peasants themselves are sold to country peddlers, who wander through the region from cabin to cabin collecting them, in order to finally dispose of them, at a town fair, to the skin dealers or to the agents of the manufacturers, tanners, or large skin merchants. The more important butchers of the large towns sell their kid skins directly to the agents of the glove manufacturers or skin merchants.

Formerly, the regular fair or market brought together all the dealers in the neighboring district, who exhibited in the market place their lots of kid skins, varying in number from five, ten, and twenty to several hundreds and sometimes thousands. These fairs were watched with the greatest interest by those who were in the skin business, as the prices obtained there for skins were an indication of the probable prices for the entire season. This is, to a certain extent, true to-day; but the town fairs no longer play the important rôle that they did twenty years ago. The railway, the press, and general education, as well as the enormous importation of skins from the Argentine Republic, Chile, the Cape of Good Hope, Arabia, Mexico, Russia, and Asia Minor, have brought about a revolution in the skin business.

The leading fairs in France, where kid skins are particularly in evidence, are held at the following places. Romans (Drôme), Anneyron (Drôme), St. Marcellin (Isère), Valence (Drôme), Clermont (Oise), Tours (Indre et Loire), Poitiers (Vienne), Lusignan (Vienne), Riom (Puy de Dôme), Aurillac (Cantal), Chalons-sur-Saône (Saône-et-Loire). The names in parentheses indicate the departments in which the above-mentioned towns are situated.

At one time, the annual fair at Valence was considered by kid-skin dealers to be the most important of all those held in France,

because the prices obtained there regulated the year's prices for France and probably for other countries as well. Its great importance in this business was due to the fact that Valence is situated in the center of a large, fine kid-skin-producing country, and its fair was held at the beginning of the season for the southern central portion of France. These conditions brought many fine and large lots of raw kid skins (several thousand dozens) to the Valence fair, which fact was sufficient to draw thither the big purchasers or their agents from Grenoble, Annonay, Paris, and other places. This fair still exists, and its prices are quoted every year; but it has lost its former importance, because, its importance being recognized, speculators have manipulated the market in order to bring about fluctuations to their own advantage.

In Italy, the finest kid skins, many of them equal to the best French skins, come from the north, above the line from Turin to Venice. A heavy, coarse skin is found in the neighborhood of Genoa, and a finer, smaller skin in Tuscany. In Rome, the kid skins are very small and the market unimportant. Naples, a great center for the manufacture of cheap gloves, is noted for a low-grade skin, as well as Sicily, Sardinia, and Corsica; those that come from the Abruzzi district, northeast of Naples, are very much better.

Switzerland stands next to France in the high quality of skins produced.

Spain and Portugal both produce large quantities, but, as a rule, they are far inferior even to those of southern France. The best Spanish skins are to be found in Saragossa and the surrounding country.

Germany produces a large number of kid skins, of which the best come from Saxony. Bavaria, Baden, Thuringia, and Silicia furnish large quantities.

The best Austrian skins are to be found in the Tyrol and Styria; those from Bohemia, Hungary, and Transylvania are not so good.

Kid skins from eastern Europe, northern Africa, South America, and Mexico are used principally in the manufacture of Suède gloves. The inferiority of these skins is due chiefly to the fact that the kids are poorly fed and neglected while alive, and the skins carelessly torn off by the butchers and allowed to dry in the sun. As a rule, European butchers—that is, the butchers of western, southern, and central Europe—are much more careful. The skins are taken off by them without being torn or cut. They are carefully stretched and dried in the shade, and when brought to the market present a clean and uniform appearance.

GEORGE B. ANDERSON,

GRENOBLE, *July 26, 1899.* *Consul.*

PAWNBROKING IN GERMANY.

Pawn shops are institutions by which money is loaned against the deposit of movable pledges. Those that conduct a so-called repurchase business (Rückkaufsgeschäfte), whose object is to purchase movable articles, guaranteeing the right of repurchase to the depositors within a fixed time, must be distinguished from the others. The two kinds differ in legal character, but serve the same economic purpose and therefore often come under the same official regulations.

In Germany, the pawn shops, which originated in the seventeenth and eighteenth centuries, were mostly public undertakings conducted by the State or community. At the present time there still exists in the German Empire the following State institutions: The Royal Lending House, in Berlin; the Grand Ducal Lending Houses, in Weimar and Eisenach; the Ducal Lending House, in Gotha; and the lending houses of the Ducal Brunswick government in six cities in Brunswick. The governmental department of Cassel also maintains pawn shops in Cassel, Hanau, and Fulda.

The pawn shops which originated in Napoleon's time in Strassburg and Metz, as well as those of Mainz and Mannheim, are institutions with independent government, in which, however, the city officials participate.

The following is a list of the municipal pawn institutions in Germany:

(1) In Prussia—Altona, Barmen, Bonn, Breslau, Bromberg, Celle, Coblenz, Cologne, Crefeld, Danzig, Dortmund, Düsseldorf, Duisburg, Elberfeld, Elbing, Erfurt, Essen, Frankfort, Görlitz, Halberstadt, Halle, Hanover, Hildesheim, Königsberg, Liegnitz, and Mühlhausen.

(2) In Thuringia—Munich, Gladbach, Osnabrück, Posen, Schleswig, Stralsund, Trier, and Wiesbaden.

(3) In the south German states—Augsburg, Bamberg, Bayreuth, Darmstadt, Freiburg, Fürth, Heidelberg, Karlsruhe, Nuremberg, Offenbach, Regensburg, and Würzburg.

(4) In the north German states (exclusive of Prussia)—Altenburg, Chemnitz, Dresden, Gera, Hamburg, Leipzig, Lübeck, and Schwerin.

Of German cities of more than 100,000 inhabitants, Magdeburg (since 1891), Bremen, Stettin, and Aix la Chapelle (since 1858) have no public pawn shops.

On the whole, the number of these institutions is larger in Germany than in France, but less than in Belgium, Holland, and Italy.

The following table gives an idea of the business transacted in the municipal pawn shops in the cities below enumerated in the year 1898:

City.	Pledges received.			Pledges remaining in custody.		
	Number.	Value.		Number.	Value.	
		Marks.			*Marks.*	
Berlin	336,949	5,640,801	*$1,340,000	198,508	3,759,610	*$884,000
Munich	358,566	3,160,067	750,000	125,336	1,352,443	321,000
Breslau	32,189	509,159	119,000	12,654	285,160	678,000
Hamburg	95,673	1,298,931	307,000	43,135	720,902	171,000
Leipzig	164,892	2,150,293	511,000	95,120	100,654	23,000
Cologne	95,443	715,968	168,000	48,724	420,192	99,000
Dresden	137,286	1,838,394	437,000	57,835	489,091	116,000
Frankfort	88,545	698,946	166,000	42,662	387,738	92,000
30 small cities	1,125,466	7,760,742	1,846,000	524,377	3,858,853	918,000

*In round numbers.

Of the larger cities, Berlin has three offices, Munich four, Hamburg three, and Dresden two, for conducting this business.

In several cities, the pledges can be made in suboffices, and in some other cities, such as Cologne, they may be made to specially licensed parties.

The business of pawn shops in the last three years appears, as far as can be estimated in the absence of uniform statistics, to depend less on general economic than on special local causes. The erection of new suboffices, as well as the decrease of the number of private pawn shops, is usually accompanied by an increase of business; while an increase in the private establishments is accompanied by a diminution of the business in the public institutions.

The capital for carrying on the business by the municipal authorities is derived either from the city treasury or the city savings bank, which is usually operated in connection with the pawn shops.

The cities of Munich, Augsburg, Frankfort on the Main, Strassburg, and Metz make use of money borrowed from private parties at from 3 to 4 per cent.

The capital invested and the results obtained in some of the larger cities in the year 1898 are shown in the following table:

City.	Capital invested during the year.		Profits for year.	
	Marks.		*Marks.*	
Berlin	3,874,375	$922,000	45,529	$10,700
Munich	1,056,315	251,000	*1,824	*420
Hamburg	881,095	209,000	27,646	6,400
Leipzig	983,287	233,000	2,691	620
Dresden	903,577	214,000	3,680	850
Cologne	729,789	172,000	7,236	1,700
Frankfort	536,722	127,000	9,443	2,200

* Loss.

The operations of the pawn shops consist of, first, receiving and assessing the value of the article offered in pawn, paying the sum loaned, and delivering to the pledger a pawn ticket; second, storing the article pawned until the expiration of the redemption period; third, returning the pledges to those holding pawn tickets upon repayment of the amount loaned, with interest and fees; fourth, sale of pledges which are not redeemed.

Personal property is accepted in pawn, if it is not too difficult to keep and not liable to deterioration in value.

The chief articles pawned are clothes, furniture, and jewelry. Registered securities, such as stocks, etc., are not received in pledge by all pawn shops.

In most municipal institutions, the name of the pledger must be given; but in private pawn shops, this is a legal requirement, due to the necessity of special precaution against accepting stolen or lost property. In such cases, the officials of the public, as well as those of the private, pawn shops are obliged to immediately inform the police.

The articles offered in pawn are valued by sworn appraisers.

The amount loaned on any article, together with the interest and fees charged, must not exceed the value estimated by the appraisers, in order that, in case it becomes necessary to sell the pledge, the institution suffers no loss. The fact that the amount loaned on any article is less than the amount assessed is an inducement for the party to redeem the pledge. The amount loaned upon precious metals or jewels is usually from three-fourths to four-fifths, and on other articles from one-half to three-fourths, of their assessed value.

All pawn shops must keep the pledges in a secure place and preserve them, as far as possible, from damage, as well as insure them against fire, without extra charge. It is forbidden to make use of any goods left in pawn, and the authorities are liable for any losses which may occur during their possession of the same.

Loans are usually issued from six months to one year. Payments on account are accepted at all times, and the interest is calculated accordingly. The pledges are returned upon payment of dues and surrender of pawn ticket.

After the lapse of a certain time, the pawn shops must sell the nonredeemed pledges, in order that no loss may be incurred on account of increase of interest. These articles are usually sold at public auction, and if the amount realized does not cover the amount loaned, the appraiser must make good the difference. In case the sum so realized is greater than the amount loaned, the surplus is held at the disposal of the pledger, but must be claimed by him within from one to three years, after which time all such moneys revert to the institution.

The interest charged varies in the municipal pawn shops. It is usual to charge from 7 to 24 per cent per annum for loans up to 10 marks ($2.38). For loans from 10 marks ($2.38) to 300 marks ($71.40) the charges are from 6 to 12 per cent. Generally, the small loans do not pay their proportionate share of the cost of administration, even at this rate of interest.

Besides these public, State, or municipal pawn shops, private business has developed to a large extent. Formerly, the German law allowed private persons to engage in this business only by special permission, and exercised strict control over them. These stringent regulations were enacted by the Prussian trade law in January, 1845. The projected trade regulations for the North German Confederation also insisted upon the necessity of a license. This proposal was, however, not sanctioned by the Diet, but a regulation was passed to the effect that persons who had been punished for a crime committed from avaricious motives could be prohibited from carrying on the pawnbroking business. The right was further conceded to the head officials to regulate the manner in which the pawnbrokers should keep their books and the control of the police.

These regulations, in practice, proved insufficient. Owing to the fact that private parties were allowed to engage in this business, it increased in a manner previously unknown. In many cases, it was carried on by people of doubtful character and by those who had been repeatedly punished by the law if the offenses for which they had been convicted were not of a nature to prohibit them from obtaining a license. The business methods of these people were often extremely onerous to those obliged to seek assistance in this direction; in some places, the interest charged was more than 10 per cent per month, or 120 per cent per annum.

All these irregularities were corrected by the statute of July 23, 1879, which is now the basis for the existing law for the German Empire. By this enactment, those engaged in the pawnbroking business are obliged to have a license, and it is refused to people clearly proven to be unfitted for such business. Furthermore, the issuing of a license is dependent upon the fact that there is a necessity for such an institution. The supervision of the manner of conducting this business has been made much more strict. Where there are no special local rules, the central authorities are empowered to issue orders regulating the extent of the powers and obligations, as well as the manner of carrying on the business of the pawnbrokers.

The repurchase businesses (Rückkaufsgeschäfte) are placed in every respect upon the same basis as the pawn shops. The payment of the purchase price in this case is considered as equivalent to the granting of a loan, the difference between the purchase price and

the repurchase price agreed upon being the amount paid for the loan, and the transferring of the article is a guaranty for such loan.

The above-mentioned imperial laws have been supplemented by special laws of the various German states. For example, the Prussian law of March 17, 1881, determines a maximum rate of interest to be charged, compels the pawnbrokers to keep records of all the business transacted by them, and prescribes that the unredeemed pledges shall be sold at public auction. The respective paragraphs of this law read:

(1) The pawnbroker shall not take more interest than (*a*) 2 pfennigs for each month per mark on the sum loaned up to 30 marks; (*b*) 1 pfennig for each month per mark on sums above 30 marks.

(2) The pawnbroker does not acquire a lien on the objects transferred to him until he has entered the transaction in a pledge book, in which he must record all such transactions in the order in which they occur. This record must contain (*a*) a consecutive number for each article as it is accepted, (*b*) place and date of transaction, (*c*) Christian and family name of pledger, (*d*) amount of the loan, (*e*) amount of monthly interest, (*f*) description of the pledge, (*g*) maturity of the loan.

(3) The sale of unredeemed pledges shall be carried out at public auction by an official of the Government or by a person designated to conduct such auctions, according to paragraph 36 of the trades law.

Gold and silver articles can not be sold at less than their intrinsic value.

The number of private pawn shops in the German Empire is about twelve hundred. In Cologne there are ten independent private establishments, besides four sworn brokers and about twenty-two persons authorized to act as mediators between the people and the public or municipal pawn shop.

The business of these private institutions in Cologne is very active, because many prefer to go to private pawnbrokers, perhaps because they lend more money on the articles or because the business is more expeditiously conducted than in the municipal house.

Although they are compelled to keep a record of their transactions, the amount of business done by the private brokers is not generally known, as they are obliged to give only authentic information to the police and tax officials. For this reason, no statistics as to the exact amount of such business can be given.

Under the head of "lombard business" are included loans on securities, mortgages, deeds, precious metals, wares, raw products, etc.; these belong to the active business of banks.

The imperial bank lends money, to one-half or two-thirds of their value, on raw products, such as grain, spirits of wine, oil, sugar, petroleum, etc., which have been appraised by special inspectors.

CHAS. E. BARNES,
Vice and Deputy Consul.

COLOGNE, *July 27, 1899.*

ELECTRIC PLANTS IN GERMANY.

A most interesting feature of this Empire's development is found in the number of electric plants in course of construction and projected. French writers, notably Emile Gautier, Charles Bos, and J. Lafargue, are trying just now to arouse French emulation. It seems to me that American manufacturers might obtain contracts to furnish some of the materials needed in the plants. A large company has been organized here to build an electric railroad from this city (Chemnitz) to Burgstaedt, 12 or 15 miles away. As projected, the road is to run through many large and important villages. If continued to Mitweida, as some think it will be, should no rival concern open an opposition line, the distance covered will amount to 30 or more miles. There is also a project to build a central electric plant for supplying the road with power and the villages through which the road is to pass with electricity for light. Chemnitz has a population of nearly 200,000 souls; the towns included in the plans referred to contain about 75,000. The company expects to expend $357,000 on the road, and a similar amount on the buildings. Besides this, a cable road is being surveyed to Augustusberg, a well-known resort a few miles outside the city. While the disposition to patronize home industries is very strong here, I can not help thinking that we must have certain things which, once seen, would win their way to favor.

An interesting question is, How can an American house hope to obtain concessions or contracts? The best way, it seems to me, would be to send one or two experts, familiar with electric plants and their needs, to study the situation. What is true of Chemnitz is true of almost every city in the Empire. In the month of June there were 330 railroads projected in the Empire. Of these, 73 were electric roads; 122 electric plants were projected during the same time. It would be easy for an expert to keep himself posted, by visiting or communicating with the United States consuls-general in Berlin, Frankfort, and Dresden. Patriotism has seldom been pushed so far as to force private companies to take inferior or dearer home products.

The market here just now is so large—consequently so important—that an effort should be made to sell in it, even at the risk of not making a great deal of money at the outset. The methods that have helped at home must help here. A report made by an expert who has gone carefully over the ground would supply specific details in a way not possible to consuls.

J. C. MONAGHAN,

CHEMNITZ, *July 25, 1899.* *Consul.*

GROWTH OF GERMAN INDUSTRIES.

Germany is enjoying an era of unprecedented activity, if not prosperity. The persistency with which Germans study foreign methods of agriculture, commerce, and manufacture has resulted in as successful a system as will be found anywhere. In one month—June, 1899—1,600 new building projects were noted in the nation's newspapers. Comparisons are often made with England and the United States, and in these comparisons Germany seldom or never suffers. Of the 1,600 projects reported for the month of June, the railroads numbered 300; electric roads, 73; factories, 212. Of these factories, 43 were for railroad supplies, 20 for stone works, 22 for mines, 16 for gas works, 14 for textile branches, and 10 for building industries. Among 122 electric plants projected, 96 are for factories and central stations, 26 are lighting plants for towns, etc. There were 184 waterworks projected, and of these 118 were for large waterworks or sewer systems, 19 for large bathing establishments, 13 for canals. There were also projected 71 churches, 100 sanitariums, 114 schools, and 142 large buildings. Of these, 92 are to be Government buildings—post-offices, prisons, court-houses, city halls, and town buildings. In the list are 50 theaters, museums, villas, etc., against 20 in May. Besides all these, June saw 38 railroad stations and 25 large bridges projected. During the month of June, 47 large factories were either partially or entirely destroyed by fire. These are to be rebuilt.

What value have these facts for us? It is well known that many of our house, electric-station, office, and factory equipments are far superior to any made here. It is a source of wonder that the Germans, in many ways as practical as any people on earth, have not adopted American locks. House after house, factory after factory, have gone up, equipped with locks little less cumbersome than those of the Middle Ages. Keys weighing from an ounce upwards have to be lugged around by anyone wanting to enter his house without calling a servant. A number of the water-closet fittings find their way in from England. We should be able to sell a great many ornamental woods for finishing and decorating purposes. Our tools, too, so much simpler and better than the ungainly and clumsy ones used here, ought to make their way among a people willing to adopt anything new, if it promises to pay. Time, material, and money saving machines must sell. The tools and machines of no other people are so much copied as are ours.

It may interest American manufacturers to read a great French

writer's remarks on Germany's industrial progress in recent times. Emile Gautier says:

All thoughtful minds to whom patriotism is something better than a mask for sowing dissensions feel more or less certain that France is losing her hold and position among nations in the industrial arena. The fact is forcing itself upon us that business is bad; and that if it goes on as it is going on at this moment, and as it has been going on for some time, our competitors, particularly Germany, will take the food from our mouths—literally eat the butter from our bread. Some people, far from pessimistic, prophesy that the world's exposition in 1900 will be an industrial Sedan, if not a Waterloo. Every national industry is affected. The manufacture of jewelry, essentially a Parisian specialty, is threatened. Twelve years ago I was told in Pforzheim, a small city in Baden, on the borders of the Black Forest, that that city furnished Paris and, through Paris, a large part of the world with jewelry. Two industries in particular which play prominent parts in modern civilization and industrial developments, the chemical and electrical, are hurt most. The wounds are seemingly deep and incurable. The chemical industries are tumbling to pieces. Years ago the cry was first sent forth; it was not heeded. Since then Germany, toiling unceasingly, moving with gigantic strides, has gone on till to-day it is master or mistress of the world's chemical markets, supplying four-fifths of the total demand. All nations, including France, pay Germany tribute for the necessary and profitable products used by apothecaries.

It is the same with electricity. A 500-page book, just out, puts Germany's position in electricity in a very bright light. The book is entitled The Distribution of Electrical Energy in Germany (Die Verteilung der Elektrischen Energie in Deutschland). Charles Bos, an ex-Parisian city councilor, an electrical engineer of Paris, and one J. Lafargue tell of their travels in Germany. The people in this Empire lent willing hands to help make the book as perfect a piece of advertising as possible, by lending excellent illustrations and photographs. One can notice that it is only the French who believe in industrial and military secrets. Almost everywhere else, manufacturers are so sure of themselves that they scorn petty and annoying regulations. They open wide their doors to visitors.* "That is the rule in Germany," continue the writers referred to. Germany does not lose by this boldness. The progress in electricity is astonishing. One can count not less than 40 companies with a capital of at least $90,000,000. These pay dividends running from 7 to 25 per cent. The field of their activities is not bounded by the borders of the Empire; the whole world is full of their fame. It is all the more astonishing when one remembers that the year 1891 saw the beginning of the large plants. Since then one company alone, the Allgemeine Elektricitaetsgesellschaft, turned off and delivered, from 1896 to 1897, 5,189 machines, erected more than 100 central stations, and equipped and started 65 railroads.

How is this progress, unprecedented in the history of the Empire, to be explained? As a rule, victory and defeat are always deserved. Doubtless, the Germans had trumps in their hands—first of all, the fame of their arms which assured them customers, because it encouraged self-reliance and obedience to the moral as well as to the political authority of the country; again, the low prices of wages and the surplus coal; finally and principally, German patience, perseverance, disciplined forces, race characteristics. Still, all these would not have availed without a fixed programme carried out with mathematical severity and in accordance with a sys-

*This is not borne out by the facts as I have found them; at least, it is hard to reconcile it with my own ten or eleven years' experience in certain lines. The efforts being made just now to keep foreigners out of the technical, industrial, and industrial-art schools do not tally with M. Gautier's statement.—J. C. M.

tem. Filled with an ambition to make their industrial and commercial achievements equal to their military record, they went to work resolutely, uniting all their efforts on one and the same object. The governments and every public power contributed their share. May the exhibit to be presented by the Germans at Paris in 1900—which, according to the opinion of experts, threatens to be an apotheosis—convince the good people of France that it is necessary to shake off the palsy under which our country seems to suffer. She must do this if she is to avoid death and complete ruin. This is the voice of one crying out in a wilderness of neglect and wanton indifference.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *July 31, 1899.*

TRADE AND LABOR IN GERMANY.

According to a statement recently published by the Imperial German Bureau of Statistics, the foreign trade of this Empire in 1898 amounted to 5,439,700,000 marks ($1,295,554,860) in imports and 4,010,500,000 marks ($954,499,000) in exports. The trade by countries was:

To and from—	Imports.		Exports.	
	Marks.		*Marks.*	
Great Britain	825,750,000	$196,528,500	803,800,000	$191,304,400
Russia	727,100,000	173,049,800	409,600,000	97,484,800
Austria-Hungary	661,200,000	157,365,600	453,700,000	107,980,600
France	265,300,000	63,141,400	205,400,000	48,885,200
Belgium	201,300,000	47,909,400	187,300,000	44,577,400
Holland	184,100,000	43,815,800	280,100,000	66,663,800
Italy	170,300,000	40,531,400	(*)	
Switzerland	173,500,000	41,293,000	256,000,000	60,928,000
Sweden and Norway	132,000,000	31,416,000	170,250,000	40,519,500
British East Indies	221,000,000	52,598,000	(*)	
United States	877,250,000	208,785,500	334,500,000	79,611,000
China	39,500,000	9,401,000	(*)	
Argentina	146,000,000	34,748,000	(*)	
Brazil	104,600,000	24,894,800	(*)	
Chile	83,000,000	19,754,000	(*)	

* No statistics.

These figures do not include precious metals, of which Germany imported to the value of 359,000,000 marks ($85,442,000) and exported 254,000,000 marks ($60,152,000).

IRON AND COAL.

Of late, a new phase in Germany's economic life has become apparent, which affects her labor market. Some branches of trade can work only with half power because they lack the raw materials. This refers especially to rolling mills, which suffer from a dearth of pig iron; and industries using steel, coal, and coke, though fully at work, are not making much profit on their output, as the advance in the cost of the raw materials is not compensated by the prices

obtainable for the finished products. Most of the iron—and some machinery—works have contracts that will keep them busy until the middle of next year. These are now working overtime, and refuse to take any more contracts at fixed time and price. The great boom in iron and coal is principally due to the large contracts given out by the Government for its railroad stations and rolling stock, and by municipal and private corporations for narrow-gauge railroads and electric tramways; also, to the many machine works that have sprung up during the last two years.

The building trade in Germany, which has been booming for some time past, is also a large customer on account of the structural iron used; likewise the shipyards, which are busy executing orders for the home and other governments, and for the merchant marine. The wages of workmen in these branches have increased so that first-class hands doing piecework in the iron and machine trade now earn from $1.75 to $2.25 per day; in some cases, this scale is reached by the best stonecutters, sculptors, and masons, but these are employed only during the building season.

When the Government contracts are filled, a period of reaction will set in, the demand for labor will lessen, and wage reductions will be in order.

The great expansion of the iron and steel trade has favorably affected the mining of coal and production of coke; 80 per cent of the German output of coke is consumed by the iron and steel industry. In 1898, the single mining district of Dortmund increased its coal product by 2,600,000 metric tons (of 2,204 pounds) over the previous year. The coal-mining districts of Saxony and Silesia present like returns.

The condition of the Rhenish Westphalian coal mines is flourishing; the output of coal would have been still greater were it not confined by the action of the trusts.

The wage scale of the coal miners, however, has not kept pace with the increased production and the high price of coal; they get to-day but 5 per cent more than was paid last year. The best hands earn $1 to $1.20 per day, but the large majority are paid considerably less.

CHEMICALS.

The workmen employed in chemical factories make good wages. This branch of industry is still in good condition, although the efforts of foreign countries to make themselves independent of German chemical supplies are beginning to be felt. The United States especially is striving in this direction; so much so that several large German establishments were compelled to establish branch factories in America, in order to retain their business. Those mak-

ing aniline colors have less to fear, as it will be some time before Americans learn the secrets of their manufacture. The export of aniline colors forms an important item in German foreign trade. It increased from 53,200,000 marks ($12,661,600) in value in 1894 to 72,000,000 marks ($17,136,000) in 1898. Of this amount, the United States took 15,600,000 marks' ($3,712,800) worth; England, 14,600,000 marks ($3,474,800); Austria-Hungary, 7,000,000 marks ($1,666,000); Italy, 4,500,000 marks ($1,071,000); and China, 5,400,000 marks ($1,285,200).

PAPER AND TEXTILES.

Paper and textiles are in an unsatisfactory condition. German paper manufacturers complain that Americans sell printing paper at 18¾ pfennigs (4.45 cents) per pound, at which rate German paper can not be sold.

Loud are the wailings of German manufacturers and exporters of textile fabrics on account of the depressed condition of that branch of trade, which, they claim, is caused by greatly curtailed sales to the United States and by the growing competition of American textiles in foreign markets. Being crowded out of foreign countries, the German manufacturers overload their home market, which cuts the prices and lessens the profits on domestic sales.

Owing to the decline in the exports, the wage scale of textile operatives has of late suffered a reduction, though the cost of living is higher. Therefore, it can not be said that the standard of life of German laborers (excepting in a few isolated branches of industry) has been raised.

Through the reports of the chambers of commerce and of the trade papers runs, like a red thread, the bitter complaint of the United States tariff, which Germans admit to have boomed American manufactures and fostered America's capacity to compete successfully in the world's markets with the industrial nations of Europe.

SIMON W. HANAUER,
FRANKFORT, *August 10, 1899.* *Vice-Consul-General.*

AMERICAN COAL IN SOUTHERN GERMANY.

No American coal has, so far as known, been shipped to Germany, but English coal is largely used here; shipments to the port of Hamburg alone for July amounting to 229,019 metric tons (of 2,204.6 pounds). English steam coal is about to be introduced in Frankfort, negotiations for this purpose having been recently completed.

Up to date, the coal used in this section has come from the Ruhr mining district in the province of Rhenish Prussia.

There is no import duty on coal in Germany. The water freight rate for coal on whole ship cargoes from Rotterdam to Frankfort varies from 2½ to 3½ marks (59 to 83 cents) per metric ton (2,204.6 pounds) to 4 to 5 marks (95 cents to $1.19) in autumn. When water is low or the demand for vessels heavy, the rates are considerably higher. For the transfer of coal from ocean vessels to river barges at Rotterdam, the lowest rate is 35 pfennigs (about 8 cents) per ton, but it becomes higher when there is a special demand for labor.

A large Rhine steamship transportation company says, in answer to my inquiry on this subject:

America could do a large business here, if able to deliver first-class coal, suitable for boiler firing, like "Westphalian blaze coal," which to-day brings 12 marks ($2.86) per ton c. i. f. Rotterdam. To maintain this trade, when once fairly opened, the coal must continue to be of the same quality and must not come from different mines. The boats bringing it could be directed to our Rotterdam house (William Egan & Co.); we would help the trade with all means in our power. We ourselves want a quantity of coal for our large fleet of steamers. We have contracted for our supplies until April next with Rhenish syndicates and English mines. We are well informed respecting the coal trade, and are ready to give any information, as our interest is to encourage the importation of coal,

This firm has 18 steamers, each of about 5,000 horsepower and 9,000 register tons, for the carrying trade on the Rhine. Other large firms are also engaged in transportation on this great waterway, which has its freight termini at Mannheim and this city, the Main River being navigable for heavy freight craft from its confluence with the Rhine up to Frankfort.

SIMON W. HANAUER,
Vice-Consul-General.

FRANKFORT, *August 9, 1899.*

PETROLEUM IN HAMBURG IN 1898.

I have to report that Hamburg's importation of petroleum in 1898 increased extraordinarily. Imports by way of the ocean in the last ten years have amounted to—

Year.	Weight.	Value.
	Dble. cent.	
1889	1,110,099	$3,500,000
1890	1,162,198	3,500,000
1891	785,909	2,300,000
1892	694,093	1,900,000
1893	796,619	1,700,000
1894	949,763	2,000,000
1895	1,308,872	3,700,000
1896	1,460,331	3,900,000
1897	2,082,528	4,300,000
1898	3,046,661	7,500,000

From the United States the imports amounted to $6,900,000, against $3,900,000 in 1897. The imports from Russian ports on the Black Sea have also somewhat increased, viz: In 1897, they were $378,420; in 1898, $499,800.

The average prices for petroleum in the last ten years have been as follows, per double centner of 220 pounds:

Year.	Price.	Year.	Price.
1889	$3.11	1894	$2.16
1890	3.02	1895	2.87
1891	2.95	1896	2.68
1892	2.73	1897	2.10
1893	2.18	1898	2.49

The imports of American petroleum into Germany by way of the ocean were:

1898	$7,247,000
1897	4,163,000
Increase in 1898	3,084,000

HUGH PITCAIRN,
Consul.

HAMBURG, *August 1, 1899.*

BRITISH-GERMAN TRADE.

Sir Charles Oppenheimer, the British consul-general in Frankfort, in his annual commercial report for 1898, just published, shows that the British exports to Germany are growing in a greater degree than German exports to Great Britain.

The increase of British exports to Germany is especially noticeable in cotton and cotton manufactures, and also in iron and its products.

In leather and leather goods, the year 1898 was the best for British trade in Germany since 1889, as also in manufactures of linen. With reference to preserves and sauces, the report says that in spite of their undeniable excellence, they are too strongly seasoned for the German palate. The sales of these latter goods could be increased, the consul-general says, if more attention were paid to the German taste; but on the whole, he is of the opinion that British exporters have reason to be satisfied with their position in the German market. British goods, he says, are constantly gaining in favor among German consumers, on account of their solidity and excellence of material and the attention paid to modern taste. England could take the position in the German market, with

reference to sporting goods, articles "de luxe," furniture, and many household supplies, which France used to occupy. He calls attention to the fact that German manufacturers are taking pains to place their goods on the market in the English style. German exports to England have decreased in preserves, drugs, flax, copper, wearing apparel, and paper and silk, and increased in cotton, wool, manufactures of iron, and instruments.

More than one-fifth of the total of German exports goes to Great Britain and her colonies. Germany's commerce with Canada in 1898 amounted to 20,900,000 marks ($4,974,000), 16,700,000 marks ($3,974,000) in exports and 4,200,000 marks ($1,000,000) in imports. The principal articles imported from Canada are asbestus, cobalt and nickel ores, and fruits. Germany sells to Canada mostly sugar and wearing apparel.

RICHARD GUENTHER,
Consul-General.

FRANKFORT, *August 30, 1899.*

WESTINGHOUSE WORKS IN GREAT BRITAIN.

Contrary to the natural expectation that we would do all the "worrying" over the intention of the Westinghouse Electric Company to build works at Manchester, the proposition has not been received with favor in all quarters here, as is shown by the following comment of a correspondent of the Manchester Evening Chronicle:

The announcement has been made, and with the usual flourish of the Yankee trumpet, that electric works, such as were never yet seen, are to be erected in Trafford Park, Manchester. This statement may be true, but it is hardly fair that British electric-manufacturing concerns should have been so absurdly depreciated in this connection. As an instance, it is stated that the Westinghouse Company are now making four large electric generators for the Manchester corporation, which it is inferred no English maker could touch. As a matter of fact, Messrs. P. R. Jackson & Co., engineers, Salford, offered to make these very machines, and to comply with all the conditions set forth in the specification of the corporation. The order was given to the Yankee firm, notwithstanding the fact that the price of the Salford firm was only £800 higher in a £70,000 job. However, it may interest your readers to know that the Westinghouse Company have come rather late in the day, as events will, I think you will find, soon prove. I suppose the next boom will be new Yankee locomotive works, simply because all our "loco." shops are crowded out with work at much higher prices than obtain elsewhere.

It is stated that 100 acres of land have been secured, that the company's buildings will occupy 40 acres, that 5,000 men will be employed, that Lord Kelvin will be technical adviser, and that all the Westinghouse patents for England have been purchased. I am not certain but that the newspapers have said the purchase includes the

patents for all Europe. At any rate, American customers of Westinghouse, who manufacture articles for European export, should find out, if they use as component a motor or an electrical fitting of Westinghouse manufacture, whether the sale of foreign patents is so absolute that it would interfere with the use in Europe of articles purchased from the American company.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *July 27, 1899.*

AMERICAN MACHINERY IN THE UNITED KINGDOM.

In reporting an interview which I had recently with an exceptionally intelligent engineer (machinist) in regard to American machinery and its use in the United Kingdom, I would say, by way of introduction, as showing how well qualified he is to speak, that for upwards of twenty-two years, including his five years' apprenticeship, he has worked at his trade in machine shops and factories in Scotland, England, and the United States. His varied experience has included work in many Scottish factories, and nearly four years as foreman in a well-known general machine shop in New York. He is at present chief engineer in a large factory in Lanarkshire.

At one time, he was employed in important locomotive works in England. On going to the United States, he first worked in the locomotive works of the New York Central and Hudson River Railway. He was here greatly surprised to see the rapidity of production, compared with the rate of production in the same branch of industry in England. He said to me:

The average employee was able to turn out fully twice as much work in a given time as his fellow-workman across the sea in Swindon. This remarkable result was accomplished largely through the use of improved machine and other tools. I afterwards found much the same difference in the rate of production existing in many other branches of manufacture. This was a number of years ago. Meantime, and especially during the past two years, the proprietors of engine and machine works in this country have been, by foreign competition, awakened to the necessity of discarding some of their British machinery in favor of American labor-saving apparatus. The result is that few well-organized works in the United Kingdom are now without a considerable proportion of such apparatus, and the proportion is constantly increasing. That it should thus increase is only natural, for this American machinery recommends itself at once. My present employers were induced to try American machinery only about a year ago. They now have five machines in use, while another of the same kind is at present on its way over from New York. I expect the amount of American machinery used by them will at least double within the next twelve months. The cause of their sudden conversion is not far to seek, and it furnishes a striking and convincing illustration of the value of American machinery. Before they began to use this machinery,

the company had four British machines for preparing manila fiber for rope making. The combined daily output of these machines did not exceed 3½ tons. Each required two operatives. An American machine was introduced, costing $1,000—about the price of each of the British machines. It is worked by two operatives of the same class and receiving the same rate of wages as did those who managed the British machines. It is capable of turning out 5 tons of the product per day if pushed, and it actually does turn out 4 tons each day. The product from the American machine is of better quality than that from the British. When this American machine demonstrated its superior utility, others were added to the plant from time to time.

To make sure that my informant was not mistaken in these statements as to the comparative efficiency of the American and British machines, I have verified them fully. However, that this is by no means a rare example of the marked superiority of certain kinds of American machinery is indicated by the fact that on the same day another engineer told me that he had just finished fitting up in a printing house in Edinburgh an American folding machine which is managed by one operative, and is hereafter to do the work that up to the present time has required four British machines, each with a separate operative. I have myself seen this American machine in operation. Its owners are greatly pleased with it, as it does its work in a far more satisfactory manner than any other machine they have for the same purpose.

The machinist first above referred to continued:

Even the most conservative manufacturers in this country are now convinced, or are beginning to realize, that they can no longer afford to do without at least a moderate percentage of American general machinery, in addition to the common machine and other tools which have already been adopted everywhere. A great disqualification which much of the British machinery has, in addition to its being slow to work with, is its unnecessary weight. It is often absurdly heavy. I may say, without reservation, that machinery of every description is invariably made lighter in the United States than in Great Britain. This is one reason why it so often gets preference over British machinery; its lightness makes it better adapted to general requirements. The American designers and makers seem to have a happy faculty of properly combining lightness with strength and durability in machinery of all kinds. One sometimes hears misinformed or prejudiced persons say that American machinery is "jerry built." This is the reverse of true, as the machinery not only does fine work, but is well built from the best materials. As to durability, it lasts as well as any in the world. A fiber machine which my employers got from the United States eleven months ago has, since its arrival, been worked continuously ten hours a day every week day except Saturday, and six hours on Saturday. It has never been for a moment in the slighest degree out of order and has never cost us a farthing in repairs, but has uniformly run without a hitch, and has at all times done its work faultlessly.

On the subject of rope and twine making machinery, with which he is especially familiar, he continued:

American machinery of this class is far in advance of that made in other countries. It has already been adopted to a great extent by each of the more important

works in the British Islands, notably by those at Belfast, where, in addition to several American drawing frames, there is a full assortment of other American machinery, comprising various sizes of the other three principal classes of machines used in the industry, viz, balling machines, twisters, and layers.

Speaking particularly of American machine and other tools, he said:

The improvements in these tools and the beneficial results from their adoption in this country have been tremendous within the last three or four years. No machine shop can now be well equipped without tools from the United States—lathes, shaping machines, planing machines, screwing machines, etc. These, not to attempt to enumerate the hundred kinds of hand tools, are being used everywhere throughout the British Islands. You may say that no machine shop worth mentioning in this country is without at least such tools as turret lathes and ordinary lathes of American manufacture. The turret lathe, which is made in many sizes, varying in price from $250 to $1,000, is a typical example of the general convenience of American tools. With the ordinary British lathes, used for the same purposes, workmen lose time in substituting one tool for another which may not be readily found. The turret lathe obviates this delay. A full assortment of tools being fixed in its turret, the workmen can instantly get any tool by a slight turn of the turret.

Certain British manufacturers are now turning out machine tools, etc., made exactly, or almost exactly, after American designs. A firm in Leeds makes a specialty of constructing machine tools and some other labor-saving machinery according to American patterns. This company probably pays a considerable sum in royalties to American patentees.

With reference to the swelling volume of importations of American machinery, and the ultimate effect upon British industries of this new factor, he expressed opinions which may come as a surprise to those not closely in touch with the industrial forces of the day. What he said is here given:

British manufacturers have been criticised for their conservatism, by none more sharply than by the leading British papers. Let me say that this conservatism has not been a matter of choice, but, as they have thought, an imperative necessity. They know—have long known—that American machinery and methods are beating them in their own markets. They have known that for their own salvation they must adopt American machinery and methods; but until quite recently, they took no step in that direction for fear of bringing on a serious complication with the working people. To rightly understand the problem which British manufacturers have to deal with, one must consider the differing industrial conditions in the United States and in the United Kingdom. Leaving wholly out of view the different economic systems, what do we find in comparing the two countries from an industrial standpoint? The wages of skilled labor in the States are from 70 to 90 per cent higher than the wages of skilled labor here. Good wages inevitably mean greater efficiency of labor. Workmen are stimulated to put forth their best efforts. They work cheerfully, and therefore they work well. Moreover, the high scale of wages has been a strong influence in favor of the invention of machinery which gives labor a productive capacity corresponding to the wages received. If labor-saving machinery has thrown men out of employment in any branch of industry, they have quickly found work in another, so multifarious are the industries and employments

in a country so vast as the United States. I personally know of cases in your country of workmen forced out by labor-saving machines getting immediate employment in making the machines.

Now, turn to the United Kingdom. The laboring population is almost a fixed quantity, both in number and occupations. It is fixed in grooves. Once a bolt maker, always a bolt maker. Moreover, old methods are stoutly adhered to by the workmen. Their wages are comparatively low; their organizations are extensive and powerful. They have, as a rule, set their faces against labor-saving machinery, because the displacement of labor here is regarded by the masses as a very serious thing. I am inclined to so consider it. You can readily see why manufacturers in this country have been conservative. It is not because they have not desired to push ahead, to adopt every new device and every new method, and to run the industries at high pressure. They have simply been afraid to venture. But the tide of iron and steel and other manufactures rolling not only to our colonies, but also into our own markets from the United States, has compelled them to venture. It was a choice between a great, permanent loss of business and the risk of a struggle with labor. At first gradually, then quite largely, they have been importing American machinery, not only for various uses in iron and steel manufacture, but also for wood working, printing, binding, pumping, electric power, rope making, milling, paper making, sailcloth making, shoemaking, and so on. They have also been importing, as I have before stated, American tools of all sorts.

There has been an effort in some quarters to change the plan of work, notably, to dispense with the 9-o'clock breakfast, which is expensive because it generally requires a shutting down of machinery. Stopping and starting in the middle of the forenoon involves a loss, direct and indirect. Moreover, it leads to a dawdling habit on the part of workmen. A straight run from 8 to 1 o'clock would be far more productive than a broken run from 7 or even 6.30 to 1. But wherever the change has been proposed, it has, I believe, been resisted. Innovations of any kind are generally opposed sharply, sometimes fiercely. The new labor-saving machinery is as yet not a large part of the total equipment in the more important industries. We have hardly got beyond the experimental stage, at least so far as the labor question is concerned. There are ominous grumblings. I can not clearly foresee the outcome. If our labor organizations can be made to recognize the absolute necessity confronting British manufacturers for adopting the best machines and the best methods all may be well, and the labor problem solve itself. Obviously, however, the only solution is the emigration of workmen, unless larger markets for British manufactures are to be secured in China, Africa, and other parts of the world, requiring increased production and thus giving full employment to men and machinery.

As everybody is aware, our markets at present are falling away—even the home and colonial markets—and some of our industries are declining. Any hope of expansion or of recovery in the near future seems chimerical, in view of existing conditions and the prospect of an ever-growing foreign competition. What wonder, therefore, that workmen are puzzled to discover any benefit to them in the new order of things? The perfected machinery for production is a matter of immense significance; the expanding markets for British products are as yet a dream. If the majority of skilled working people in the United Kingdom do not abate their hostility to improved machinery, and take the chances of a readjustment of the mass of labor to the new mechanical facilities by emigration or otherwise, there is trouble ahead, the consequences of which no man can measure. The engineers' strike, which came to an end in the spring of 1898, threatened the entire fabric of British industries by shaking the confidence of the world and of our own people in

their productive power. Another such experience would be disastrous beyond all calculation. Our manufacturers have to face that possibility. I do not put it as a probability, because I am not a pessimist, but prefer to look at the bright side. It were useless, however, to blink the fact that in the industrial revolution now going on, brought about chiefly by American competition, there lurks a grave peril.

RUFUS FLEMING,

EDINBURGH, *July 24, 1899.* *Consul.*

RUSSIAN CATTLE FOR ENGLAND.

The Russian Government has for some time past been endeavoring to induce Great Britain to permit the entrance of Russian cattle, hogs, and animal produce of various kinds. Under the auspices of the South Russian Society for the Exportation of Cattle and Animal Products and at the instigation of the Minister of Finance, a committee of English experts will visit Russia on or about the 10th of September next for the purpose of examining various veterinary establishments and also the numerous stock farms throughout southern Russia. The committee will consist of Mr. Kearley, M. P., Mr. Lambert, M. P., and Professor Cope, chief of the veterinary service of England. This committee will arrive at Moscow, and, after visiting the veterinary establishments in northern Russia, will be taken south to Kharkof, thence to Nicolaiev, thence to Rostoff-on-Don, and the northern Caucasus. A special car has been placed at the disposal of the committee, and the sum of 5,000 rubles has been granted by the Russian Government to cover the expenses of the trip. It is desired, in the first place, that the visitors should see for themselves the condition of the veterinary establishments, and also that Russian cattle, hogs, etc., are free from contagious disease. After having looked the ground over, the committee will be in a position to advise the Russian Government what measures, if any, might be taken which would allow Russian cattle to enter British ports under the most favorable circumstances. Russia has been engaged for some time in trying to promote this trade by subsidizing steamers having cold-storage room and by aiding, at various shipping points, in the establishment of slaughtering houses, packing houses, and houses for smoking hams, sides, and shoulders of pork. The plan also includes the shipment of dairy products.

THOS. E. HEENAN,

ODESSA, *August 5, 1899.* *Consul.*

CONSTRUCTION OF STREETS AND BUILDINGS IN BRESLAU.

The law regulating the construction of houses and streets is very strictly enforced in this city, under the supervision of the board of public works and city engineers.

STREETS.

All new streets are paid for by the owners of property adjacent to the street, as well as the sewer, water, and gas connections, upon a warrant issued by a city engineer, countersigned by the auditor. Before a new street can be constructed, the majority of the property holders on said street must petition the city government to have it surveyed and advertised for construction. The city engineer and the board of public works receive bids for the same and award the contract to the lowest and best bidder, who is bound to finish the street within a specific time and to keep the same in repair for five years. The property holders must deposit with the city treasury the whole amount which the construction of the street will cost, before the work commences.

First, the sewer is dug in the center of the street, all water and gas mains laid, and every 25 feet (which is considered the width of a lot) the sewer, water, and gas connections are made to main sewer, water, and gas pipes, extending to the property line.

The specifications for the construction of streets have the following requirements:

Asphalt streets.—The street is dug and leveled to receive the foundation and asphalt as follows:

Twelve inches of coarse gravel and Portland cement are well mixed upon a 12 feet square board platform. The same is mixed dry and then thoroughly sprinkled with water to make a compact mass, when it is wheeled into the street, thoroughly leveled, and left standing for two days when the weather is warm. When cold, it is left until perfectly dry and as hard as stone. This foundation is then inspected by the board of supervisors. If it is found to be made according to specification and dry enough, the contractor is permitted to finish it by putting on 2 inches of asphalt; the same being thoroughly rammed and rolled. The price of a square meter (10.7642 square feet) of asphalt pavement amounts to about $3.57.

Granite streets the crevices of which are filled with sharp gravel sand.—The bed or foundation for this kind of street is first filled with irregular rock, laid by hand side by side, 8 inches high; on this are scat-

tered 4 inches of small, broken rocks—about the size of hen's eggs. These are well slushed with water and rolled by a steam roller weighing from 40,000 to 66,000 pounds. When fast enough, a layer of 5⅜ inches of gravel sand is spread over the rocks and again rolled by the steam roller. Thereupon, the granite blocks of 6⅜ inches height are rammed in and the crevices filled with sharp gravel sand. Afterwards, the whole street is covered with sand to the thickness of an inch and left standing for a week, until the sand is thoroughly slushed with water or rain, so that all crevices are filled. The price of a square meter of this pavement amounts to about $3.45.

Granite streets the joints of which are grouted with Portland cement.—A layer of 6 inches of coarse gravel and Portland cement is prepared in the same way as for asphalt streets and left standing for at least two days. After inspection of this foundation, a layer of 1¼ inches of sharp gravel sand is put on. When the same has been thoroughly leveled, pavers begin laying diamond granite blocks 6⅜ inches in height, all blocks being of equal size. After the street is paved, it is thoroughly rammed with iron rammers (three men to each rammer), and all joints are completely grouted with Portland cement. The whole street is then slushed with Portland cement, the thickness of a slime of soapsuds, so that all crevices are thoroughly filled. It is left standing for two days before being opened for traffic. The price of a square meter amounts to about $3.52.

All streets have sufficient crown to make a perfect drainage to the gutters; but no gutter crosses any street, there being three sewer connections on each side in every square, which are sufficient to carry off all the surface water even during the heaviest rain. The intersections of all streets have crown enough to throw the water into the respective gutters, which lead to catch-basins covered with iron gratings of about 12 by 20 inches, with 1-inch openings between the bars.

HOUSES.

The houses have in general four stories besides the basement. The specification of the same is as follows:

The thickness of the front walls must be: In the cellar, 32 inches; in the first and second stories, 26⅜ inches; in the third and fourth stories, 21½ inches; in the attic, 16 inches.

Partition walls (which must not be over 10 meters, or 32.7 feet, from center to center) in the cellar, 26⅜ inches; in the first and second stories, 21½ inches; in the third and fourth stories and attic, 16 inches.

Partnership walls must be: In the cellar, 21½ inches; in the first and second stories, 16 inches; in the third and fourth stories and attic, 10⅜ inches.

The joists must be: In the first story, 12⅝ inches; in the second story, 11⅝ inches; in the third story, 10⅝ inches; in the fourth story, 9⅜ inches.

The building is inspected by the board of city engineers and the inspectors of buildings: (1) When the cellar walls are finished and before the joists are laid; (2) when the brick or stone work of the whole building is finished; (3) when the house is finished and ready to be accepted by the owner.

The inspectors receive no fee from the contractor or the owner of the building, but they are paid by the city out of the general fund derived from taxation of realty.

C. W. ERDMAN,

BRESLAU, *July 22, 1899.* *Consul.*

GERMAN PRIZE FOR BEET-LIFTING MACHINE.

Among the agricultural implements needed in cultivating the sugar beet, no machine is more useful than a good beet digger. In fact, some such device has become absolutely indispensable to everyone engaged in that kind of work. A number of beet-digging machines have been brought into the market, some of which are very serviceable. In order to ascertain which is the best, the "Deutsche Landwirtschaft-Gesellschaft" (German farming association) has opened a prize competition, offering premiums amounting to a total of 550 marks ($130). The examination of the competing machines is to be held in the fall of the year 1900. An additional prize will be given to that machine which will raise and top the beets at the same time.

In conjunction with the above association, the "Verein der Deutschen Zuckerindustrie" (association of the German sugar industry) has offered prizes amounting to 8,000 marks ($1,904) and 10,000 marks ($2,380). These prizes will be given to machines that are not only the best of those exhibited in the competition of the farming association, but that in addition thereto come up to certain other requirements and specifications set forth in the conditions of the prize offer. These conditions have not yet been published.

This competition is not confined to German manufacturers. Foreigners will also be admitted, and it is expected that the results of these offers will go a great way towards solving the important question under consideration.

HENRY W. DIEDERICH,

MAGDEBURG, *August 28, 1899.* *Consul.*

THE GERMAN BEET-SUGAR CAMPAIGN OF 1898-99.

To-day, the German beet-sugar season ends, and the campaign of 1898–99 will soon have passed into history. The official report of the year just closing was published a few days ago, and it shows, upon the whole, results that are quite satisfactory. True, there was some decrease of production in the sugar fields, but there was no material decrease in the final results. The good prices realized for raw sugar during the last months, which reached their high-water mark during the month of August at 11.25 marks per 50 kilograms (2.43 cents per pound), more than compensated for the low prices ruling earlier in the season.

A few years ago, it was generally supposed and feared that the area of land devoted to the cultivation of the sugar beet in Germany would keep on increasing from year to year, but there has been no development to speak of in that direction. The acreage of the year 1899, which is to supply the beet material for the new campaign—1899–1900—now to begin, shows only the very slight increase of 0.35 per cent over last year. It is therefore safe to say that the German beet-sugar industry has come to a standstill, as may be seen from the following table of the areas cultivated:

	Acres.
1896–97	1,050,000
1897–98	1,080,000
1898–99	1,054,000
1899–1900	1,058,000

The crop of beets grown amounted to 12,144,291.4 metric tons* in 1898, which was 1,553,691.4 metric tons less than the year before. As the German farmer calls 12 metric tons per acre a fair average crop, he was not so well pleased, as he averaged only 11½ tons. But while the quantity did not come up to the expectations, the quality of the beets was superior to that of the preceding year. The German beet had never before been so sweet; its sugar contents amounted to 13.36 per cent. The result was that almost as much sugar was produced in 402 factories from this short crop of beets as was ever produced before, viz, 1,623,025 metric tons, which is 1.705 metric tons of raw sugar per acre.

The German farmer received, on the average, $4 per metric ton for his beets, and the German sugar manufacturer, on the average, $49.50 per ton for his raw sugar.

* Of 2,204.6 pounds.

It would be very interesting to know just what are the profits of the owners of, and the stockholders in, the sugar factories; but it is impossible to gather any reliable data on this subject. All private companies and close corporations, of course, publish no report of any kind; all regular stock companies, however, are compelled by law to publish, at certain periods, a statement of their business.

During the past few weeks, I have collected from the press the following data showing the capital, earnings, etc., of 32 factories which I selected at random. I give this table for what it is worth.

HENRY W. DIEDERICH,

MAGDEBURG, *August 31. 1899.* *Consul.*

Statistics of beet-sugar factories.

Factory.	Capital.	Receipts.	Expenses.	Expenses for beets.	Average per ton.	Gross earnings.
Göttingen	$95,700	$210,353.25	$195,095.20	$121,473.15	$4.60	$15,258.05
Linden-Hannover	.....	297,361.70	287,377.60	.....	.....	9,984.10
Oelsburg	64,260	113,200.65	107,152.50	68,790.15	4.78	6,048.15
Gandersheim	104,800	98,172.70	80,667.70	47,752.25	3.44	17,505.00
Rostock	238,000	307,067.45	272,117.95	211,795.95	3.28	34,949.50
Warburg	253,113	123,306.25	66,733.63	48,687.70	1.92	56,572.62
Brakel	266,036	190,250.30	172,644.73	.....	.....	18,605.57
Uelzen	.....	387,601.35	376,803.00	265,139.55	4.76	10,798.35
Goldbeck	171,360	215,311.95	208,030.25	142,999.65	4.72	7,281.70
Niederhone	.....	103,045.45	95,141.55	.....	.....	7,903.90
Papenteich	93,343	97,867.60	75,636.88	44,439.65	2.56	21,230.72
Markranstädt	107,100	168,508.85	150,601.99	.....	.....	17,906.86
Holzminden	.....	82,943.40	.....	.....	.....	.....
Döbeln	164,220	432,898.38	403,630.85	299,154.10	3.14	29,267.53
Harsum	160,650	157,946.35	151,525.90	.....	.....	6,420.45
Ammensleben	76,160	144,071.35	143,049.50	96,332.65	4.14	1,021.85
Hattersheim	109,950	208,175.40	174,324.00	123,275.65	4.66	33,851.40
Marienwerder	142,800	.....	.....	.....	.....	.....
Marienburg		.....	.....	.....	.....	.....
Barum	90,856	221,680.19	187,756.97	134,484.68	4.64	33,923.22
Dirschau	107,100	.....	.....	.....	.....	.....
Woldegk	.....	231,920.92	219,162.86	71,491.40	1.94	12,758.06
Demmin	.....	306,812.15	285,883.95	.....	.....	20,928.20
Gross-Umstadt	190,400	224,506.75	204,842.85	.....	.....	19,663.90
Körbisdorf	.....	298,068.21	264,408.85	202,379.93	4.28	33,659.36
Lafferde	114,240	181,750.35	162,175.90	115,222.15	4.90	19,574.45
Lützen	285,600	.....	.....	.....	.....	.....
Salzwedel	.....	215,713.95	186,214.05	.....	.....	29,499.90
Rethen	173,573	272,748.80	262,401.65	191,213.20	3.18	10,347.15
Gross-Zünder	.....	204,929.60	181,043.65	.....	.....	23,885.95

Statistics of beet-sugar factories—Continued.

Factory.	Number of 12-hour workdays.	Beets worked.	Daily average.	Area cultivated.	Beets harvested per acre.	Sugar produced.
		Tons.	*Tons.*	*Acres.*	*Tons.*	*Tons.*
Göttingen	126	26,343.5	209	2,486.6	10.05	.....
Linden-Hannover	95	40,460	426	4,573.8	8.89	5,520.9
Oelsburg	.....	14,345	.....	1,260	11.39	1,993.9
Gandersheim	95	13,910	147	1,388.7	10.01	.....
Rostock	.....	40,100	.....	4,820.8	8.32	5,387.5
Warburg	.....	25,471.5	.....	2,631.2	9.96	3,536
Brakel	.....	26,640	.....	2,790.6	9.52	3,583.7
Uelzen	139	55,625	400	6,400.8	8.69	7,384.2
Goldbeck	100.5	30,267.4	302	3,906	7.75	4,169.5
Niederhone	80	14,440	180	1,515.2	9.53	1,878.7
Papenteich	.....	18,500	.....	1,512	8.93	.....
Markranstädt	128	22,925	175	2,268	10.11	3,170.5
Riesonburg	135.5	28,759.5	213	2,662.4	10.8	3,586.3
Holzminden	70	11,388	163	1,374.7	8.28	1,538
Döbeln	.....	58,170	.....	5,670	10.26	.....
Harsum	.....	.....	.....	1,776.6	.....	.....
Ammensleben	.....	20,850	.....	2,034.9	10.27	.....
Hattersheim	.....	26,705.5	.....	2,223.9	12.01	.....
Marienwerder	161	29,483	183	7,163.1	10.9	3,539.1
Marienburg	186	48,660	262			5,859.8
Barum	137	28,941.8	212	2,573.5	11.24	4,214.9
Dirschau	142.5	32,647.6	226	3,024	10.79	.....
Woldegk	142	36,688	259	3,918.6	9.25	4,383.8
Demmin	132	42,451	322	5,109.3	8.3	5,817.2
Gross-Umstadt	.....	30,865	.....	2,520	12.25	3,897.4
Körbisdorf	.....	47,319	.....	1,418.6	.....	11,453.4
Lafferde	.....	25,562.5	.....	1,959.3	13.05	.....
Lützen	177	48,953	226	3,807.7	12.81	6,652.2
Liessau	126	24,106.5	192	2,142	11.25	3,082.7
Salzwedel	.....	29,083.3	.....	3,764.3	7.59	3,898.8
Rethen	.....	36,996.5	.....	3,158.8	11.55	.....
Gross-Zünder	.....	31,811.5	.....	.....	.....	4,038.6

ROADSIDE FRUIT IN EUROPE.

The cultivation of fruit trees along the highways of France is being extended each year. The Government having first set the example, the communes in certain departments adopted this practice as a source of revenue, so that now roadside-fruit cultivation has become an important branch of national industry.

It is not, however, only in France that fruit trees have been planted along the roadside; in Germany, Belgium, and the Duchy of Luxemburg, the system has been greatly developed, giving satisfaction to the state as well as to local interests. On the roads of Würtemberg, for instance, the fruit harvest from this source produced in 1878 over $200,000, and last year the return had more than trebled. The annual revenue derived from the national roads of Saxony planted with fruit trees rose from $9,000 in 1880 to $42,000 in 1892, furnishing a total sum of $340,000 for the thirteen years.

In Belgium, according to the statistics of 1894, over 4,630 kilometers of roads were planted with 741,571 fruit trees, which furnished the almost incredible sum of $2,000,000. In France, the production of fruit trees is estimated at $60,000,000.

In Westphalia, in the duchies of Baden and Saxe-Weimar, in Alsace-Lorraine, Switzerland, etc., the employees of the administration of roads and bridges and the road supervisors are instructed in fruit arboriculture. In some of the southern departments of France the roads are bordered with cherry trees, producing the small fruit called merise (wild cherry) much appreciated for making wine sui generis, preserves, and even alcohol.

In the Touraine, plum trees dominate; while in the Allier and the Limagne, the walnut trees transform the roads into shady walks. In Auvergne, the chestnut tree flourishes; while in Normandy, place is naturally given to the apple tree.

Some twenty years ago, the picturesque roads of the northeast of France were lined with stately poplars; but, although ornamental, their roots went far and wide, rendering the adjacent meadows sterile, and plows were continually stopped by offshoots lying almost at the surface of the soil. The farmers appealed in such strong terms that the communes decided the fall of the poplar, and soon axes and saws were brought into requisition and the roads cleared of these trees in favor of the humble, but more useful, mirabelle (small plum), to the great satisfaction of the villagers. Thousands of baskets of this fruit are shipped to Paris daily.

Some thirty years ago, the distillation of the mirabelle was unknown in the country districts; the people plucked it as food for their swine; but to-day, they have learned to make more profitable use of it. They distill it in large quantities and find a ready market for it. A quart of this alcohol, slightly perfumed, sold five or six years ago for only 20 or 30 cents; to-day, it brings not less than 50 or 60 cents, while in Paris the best kind can not be obtained under $1.

HILARY S. BRUNOT,

ST. ETIENNE, *August 10, 1899.* *Consul.*

STREET-CAR STRIKE IN NANTES.

Three weeks ago, all the employees of the tramways of Nantes quit work and demanded an increase in wages, an opportunity for promotion, three holidays during each month, and a decrease in the daily hours of service. After a week's idleness, work was resumed, the men having been conceded nearly all they demanded.

The cars are propelled by compressed air. The men who ma-

nipulate the machinery from the front platforms of the cars are called conductors, and those who collect the tickets and punch the same are known as receivers. The fare is not uniform for all distances, as is the case in most American cities, but passengers are charged so much per section—2 sous, or about 2 cents, for one section, a distance of nearly a mile; three sous for two sections; and so on until 6 sous are charged, which is the maximum price for the entire route, being a distance of about 4 miles. The cars are not so well patronized as those in American cities, and the service is poorer, persons being often obliged to wait ten or fifteen minutes for a car.

Previous to the strike, the men were obliged to work twelve or fifteen hours per day. The conductors received 4 francs (77 cents) per day, and those of the first grade 4.50 francs (87 cents) per day. Receivers were paid 3 francs (58 cents) for the second grade, and 3.50 francs (68 cents) for the first grade. The tram cars stop running at 9.30 in the evening, and resume business at 6 in the morning, the same men being on duty during the entire time. After several conferences between the company and the employees, the service was resumed, the company agreeing to pay the following prices:

Class of labor.	Wages.	
	Francs.	
Switchmen:		
First class.....per month...	115.00	$22.19
Second class.....do.....	110.00	21.23
Third class.....do.....	105.00	20.26
Track cleaners:		
First class.....do.....	90.00	17.37
Second class.....do.....	80.00	15.44
Third class.....do.....	75.00	14.47
Firemen:		
First class.....do.....	120.00	23.16
Second class.....do.....	115.00	22.19
Third class.....do.....	110.00	21.23
Conductors:		
First class.....per day...	5.00	.96
Second class.....do.....	4.50	.87
Third class.....do.....	4.00	.77
Receivers:		
First class.....do.....	4.00	.77
Second class.....do.....	3.75	.72
Third class.....do.....	3.00	.58

The men have been granted three holidays during each month, but without pay, and twelve hours are considered a day's work. During the strike no riots occurred, but no attempt was made to start the cars, although the company claimed that new men could have been procured for the service.

JOSEPH I. BRITTAIN,
Consul.

NANTES, *August 7, 1899.*

No. 230——4.

ELECTRIC RAILWAY IN BORDEAUX.

American manufacturers of electric-railway supplies may find it to their interest to note the fact that the Tram and Omnibus Company of Bordeaux, a company having the exclusive right to operate street cars and omnibuses in this city, whose charter had still several years to run, has recently sold out to a new company, which will operate under a new charter. It is understood that the old company is to receive 12,000,000 francs ($2,316,000) for its property and rights for the unexpired term of its charter, stockholders being allowed the option of stock in the new company on favorable terms instead of cash. The former company was English, with headquarters in London; the new one is French. The chairman of the board of directors is M. Mercet, 10 rue de Londres, Paris. It is understood that the present managing director, M. Bretherton, will continue to hold the same position under the new management. As the legal formalities are not yet complete, the terms of the new concession can not be given. It is understood, however, that they require an immediate increase of the service in the city and vicinity, and that the new company will at once proceed to substitute electric power for horsepower, which has been used heretofore. Information can be obtained by addressing M. Bretherton, managing director, Tram and Omnibus Company, rue Tivoli, Bordeaux, France.

ALBION W. TOURGÉE,
Consul.

BORDEAUX, *September 4, 1899.*

NEW USE FOR AMERICAN DRIED APPLES IN FRANCE.

It is a curious fact that the consumption of wine in France is steadily diminishing. This results from a variety of causes, prominent among which is a general belief among the common people that the product of the vine is apt to be deleteriously adulterated. Whether this is true or not, it is a matter of such universal comment that they naturally make it an excuse for discarding wine and indulging in a beverage which they declare is too cheap for anybody to dream of adulterating. Their first resort was to the product of the apple and pear orchards of Normandy and Brittany. In 1895, the consumption of cider in Paris amounted to 10,000,000 gal-

lons, but in consequence of the bad apple harvests of 1896 and 1897, this fell in 1898 to an utterly insignificant figure.

The importation of cider to meet the demand was impossible, because of the prohibitive duties of 8.50 francs per hectoliter, amounting with the octroi duty to about 16 cents a gallon in Paris. Of course, no man could pay a tax of 4 cents a quart and furnish a drink cheap enough to meet the demand for cider, which could not be diluted to any extent with water and retain its peculiar "tang." It became necessary, therefore, to find a substitute.

With the English or American taste, this substitute would probably have been found in a sort of beer or some mere alcoholic product. But the Frenchman, if he is not addicted to absinth, usually cares little for the alcoholic character of his favorite tipple. What he wants is, not to become intoxicated, but to have a pleasant drink which he can sip by the hour in company with his friends at the buvette. Two things are essential—first, it must have a pleasant, fruity flavor (if a little piquant, so much the better); and, second, it must not make too heavy a drain upon his purse. The bourgeois rarely allows his palate to make him forget his pocket. Cheapness and briskness are essential elements of a popular drink for the French people.

Out of these conditions, aided by the genius of some unknown mixer of drinks in Paris, was evolved "piquette," a sparkling, fruity beverage, composed of dried apples, raisins, and water, allowed to stand until fermentation takes place and then bottled, with the addition of a little sugar, or served directly from the cask. Two cents a glass is the ordinary charge at the buvette for this spicy and, as a rule, harmless beverage. A franc (20 cents) will furnish a man a "treat" which is good for a two hours' sitting at the buvette, but hardly develops enough alcoholic influence to perceptibly reduce the ordinary liveliness of the tongue.

The following is the receipt given me for its preparation by one of the leading manufacturers of Bordeaux:

PIQUETTE.

Five pounds of raisins, 5 pounds of dried apples, and 5 gallons of water. Put in an open cask and let stand for three days; bottle with a half teaspoonful of sugar and a bit of cinnamon in each bottle. Vary the flavor to suit the taste.

It is really a pleasant summer beverage and if made in the United States might take the place of some of our mysterious decoctions with decided advantage to health.

The special American interest in piquette, however, is found at present in the fact that the dried apples out of which it is made are

imported from the United States.* In 1898, 50,000,000 gallons of this piquant beverage were consumed in France, against 35,000,000 in 1897. The dried apples used in its manufacture are the lowest grade of windfalls—sliced, including skins, cores, and "inhabitants," without distinction as to quality or variety, except as follows:

(1) The thin slices must be well dried and securely packed, so as not to color or heat upon the voyage. The slices must be white and have a spicy odor or they will not sell.

(2) Decayed or over-ripe fruit should not be used, as it gives too dark a color to the product and will not bring a price sufficient to pay cost of shipment.

The consumption of this beverage is rapidly increasing in France, and it is said that the cider crop of this year is likely to be so short as to create an even greater demand for it. Made of carefully assorted fruit, it should be a valuable addition to our household drinks, since but little need be made at a time and it is both piquant and practically innocuous.

ALBION W. TOURGÉE,
Consul.

BORDEAUX, *September 1, 1899.*

AMERICAN WHEAT FOR THE MANUFACTURE OF MACARONI.

The Department of State has received from the Department of Agriculture a letter addressed to it by Mr. James B. Simpson, of Dallas, Tex., requesting its assistance in forwarding samples of Texas wheat to the United States consul at Lyons, to be tested as to its fitness for use by French manufacturers of edible paste. Mr. Simpson's letter was referred to the Bureau of Foreign Commerce. It is accompanied by another letter from him, which was printed in a Texas newspaper, in which he says:

The Department of State favors me by sending to my address reports from its consuls.

In the volume of reports for July last, I observed that Mr. John C. Covert, United States consul at Lyons, France, reports an enormous increase in the manufacture and consumption of macaroni and like edible pastes, not only in France, Italy, Spain, and Switzerland, but all over the globe.†

This gentleman states in an interesting monograph upon this subject that a hard wheat containing a large percentage of gluten and relatively small percentage of starch is required, and that the millers and bakers of France are finding out that bread is much improved by putting into it a larger amount of gluten than is found in the French wheat, or in the ordinary starchy wheats from America.

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*I would note in this connection that of 500 barrels of dried apples which I recently examined, 200 were a dead loss to the shipper, because of lack of care in drying and packing.

†Consul Covert's report was printed in CONSULAR REPORTS No. 226 (July, 1899), pages 468–470.

Mr. Covert states that the estimated output in France alone of these edible pastes approximates now 170,000,000 pounds, and is surely destined to a vaster increase. This estimate, of course, does not include the manufacture and output of macaroni in Italy, Spain, or Switzerland, where the demand for hard, glutinous wheats is yearly increasing, the consul stating that a number of establishments are constantly employed in making large hydraulic presses for the production of these pastes, not only in France, but in Italy, Germany, and Switzerland.

Believing that the wheat exactly adapted to the making of macaroni and similar edible pastes is that hard, flinty, glutinous wheat called in North Texas the Nicaragua wheat and seemingly almost indigenous to our black lands and warm climate, and knowing that there never was a failure in the growth of this grain in North Texas, and that such is its wonderful productiveness that an average of 50 bushels to the acre is made, I took occasion to write these facts to Mr. Covert.

Mr. Covert became deeply interested in my letter, realizing at once the great possibilities to North Texas, and referred it to M. Edouard W. Sorrell, a distinguished chemist of Chabeuil, France. That gentleman wrote in reply a letter of some six pages (too long to insert here), but substantially stating that if we could grow this character of wheat a practically limitless demand existed for it in Europe, and that it could readily be shipped through Galveston.

M. Sorrell further suggested that he be sent 2 bushels of this Texas-grown wheat for chemical analysis, which he would gladly make, and if it was as anticipated not only could France take all produced in North Texas, but that capital would quickly come from France to Texas, putting up here establishments with a yearly output of $18,000,000.

It is proper for me to observe in this connection that Consul Covert suggests that if this wheat prove suitable to edible-paste requirements, Texas should have a quantity made into macaroni and exhibited at the coming exposition at Paris; and he would himself, in the interest of Texas and the immense possibilities growing out of the production of this grain, devote a month of his time to bringing the matter before the milling and macaroni trade of France.

M. Sorrell is also pleased to say in his letter to Consul Covert: "I would be happy to have you tell the Dallas people that I will be glad to help them."

Since I have taken up this grain matter, I have spoken with several farmers of Dallas County, who are unanimous in their opinion that we can grow to perfection in North Texas just the wheat required by this great European industry, and so satisfactory would be found the profits that our black lands would advance quickly from 25 to 50 per cent in value.

If I can be furnished the 2 bushels of wheat required, I will see that it is transmitted to our consul at Lyons.

The wheat will be forwarded to the consul at Lyons for the proposed analysis by M. Sorrell.

TRADE OPPORTUNITIES IN RUSSIA.

The Austrian consul in Tiflis complains about the very limited amount of iron exported from his country to the Caucasus. He pictures the progress being made by the Germans. Among other things to which he calls attention is the competition between the Caucasus and Siberia. The Siberian works produce an iron that is

very popular in the Caucasus, but the terms of delivery are somewhat oppressive. Orders must be given a year ahead, with at least 10 copecks per pood (5.15 cents per 36 pounds) paid in advance. Even then no guaranty is given that goods will be delivered on time. In Siberia, the work goes on with never an hour's rest the year round. When the ice melts in the rivers, as large quantities as possible are delivered. As soon as the deliveries begin, buyers must have remittances ready; and it often happens that the greater part of the payment must be sent by wire. Inasmuch as the demand is always larger than the Siberian output, the works in that part of the Empire fix prices and conditions. In spite of the enormous import duties—50 to 60 copecks per pood (25.7 to 35.5 cents per 36 pounds) on some kinds—foreign countries send in large quantities. Germany is very well represented. Baku buys half its supply outside of Russia, and of this Germany supplies 20 per cent. Most of the German iron exported thither is for reservoirs, boilers, and what is known here as façon iron. There is a big opening for iron girders, beams, etc. Hitherto, Belgium has had the most of this trade, but is losing it on account of the inferior qualities supplied. The same is true of band iron. There is also a large demand for what is known in Germany as steel paggeln, for boring chisels. They are wanted in lengths of 39 to 58.5 inches; width, 5.85 to 18.5 inches; thickness, 3.12 to 5.85 inches. The production of these bars, weighing, as they do, 1,300 to 2,600 pounds, is very difficult. Recently, Krupp began to sell them for $119 a ton. In the middle-grade goods, Germany controls the market. In spite of this Empire's splendid equipment for producing wire ropes, it has not sold many, if any, to Russia; England, Belgium, and Austria-Hungary have controlled this line. This field is still open to good articles. The wire rope of Russian production, in many lines, fails to give the same satisfaction as foreign goods. Roof tin has a good chance. Great quantities are in demand.

In spite of Russia's rapid rise in industries, it will be a long time before she will be able to supply more than a very small percentage of her vast needs. Even the enormous duties can not keep foreign goods out of her markets. Mariopol, on the Sea of Azof, is an excellent field in which to sell machines and parts of machines. Here, too, is a good opening for wire ropes, for machine couplers for wire ropes, for shovels, furnace forks, mining machinery, etc. English goods are falling off because they are too dear. Germany, favored by cheap transportation expenses, supplies a large part of the present demand. Enterprising concerns that go early to Mariopol, in the heart of the mining country, are sure to reap a rich reward. Here, too, is a most excellent opportunity for manufacturers of agricultural

implements. Harvesting machines will sell in the Crimea, notably in Kertsch.

The opportunity offered in Russia is one of the very best in the world. All we have to do is to adapt ourselves to the requirements of the Russian people—not a very hard task—and a very large share of her foreign trade will fall into our hands. The conditions prevailing in that vast Empire could not be more favorable to our manufactures. No nation is so well equipped as we are to supply Russia with the very best weapons with which to work out her industrial and commercial destiny. There are vast forests to be cut away, marshes to be drained, mines of all kinds to be opened, canals to be dug, waste lands to be reclaimed, railroads and mills of all kinds to be built, etc. Who is going to build and supply?

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 15, 1899.*

GERMAN AND FRENCH TRADE IN RUSSIA.

Germany is sending larger quantities of textiles to Russia than is any other country. The following table gives the total imports into Russia for the last three years and the amounts sent thither from this Empire:

Articles.	1896.		1897.		1898.	
	*Rubles.**		*Rubles.**		*Rubles.**	
Raw wool	9,835,000	$3,845,485	11,370,000	$5,855,550	13,619,000	$7,013,785
From Germany			6,286,000	3,237,290	6,525,000	3,360,375
Wools, combed, spun, and twisted	13,444,000	5,256,604	17,854,000	9,194,810	20,336,000	10,473,040
From Germany			11,245,000	5,891,175	10,560,000	5,438,400
Raw silk	7,931,000	3,101,021	8,582,000	4,419,730	8,993,000	4,631,395
From Germany			2,476,000	1,275,140	1,758,000	905,370
Raw jute	3,362,000	1,314,542	2,699,000	1,389,985	2,911,000	1,499,165
From Germany			482,000	248,230	435,000	224,025
Woolen and half woolen goods	5,099,000	1,993,709	4,841,000	2,493,115	5,186,000	2,670,790
From Germany			2,953,000	1,520,995	3,164,000	1,629,460
Cotton yarns	3,845,000	1,503,395	4,074,000	2,098,110	4,371,000	2,251,065
From Germany			1,233,000	634,995	1,496,000	770,440
Cotton goods	2,374,000	928,234	2,496,000	1,285,440	2,873,000	1,479,595
From Germany			802,000	413,030	1,158,000	596,370
Silk and half-silk goods	1,601,000	625,991	1,752,000	902,280	1,852,000	953,780
From Germany			977,000	503,155	1,344,000	692,160
Hemp and linen goods	1,762,000	688,742	1,747,000	899,705	1,679,000	864,685
From Germany			737,000	379,555	731,000	376,465
Underwear, hosiery, clothes, etc	717,000	280,347	594,000	305,910	677,000	348,655
Passementeries, etc	1,118,000	437,138	1,253,000	645,295	1,532,000	788,984
From Germany			916,000	471,740	1,247,000	642,205

*Reduced to United States currency in the Bureau of Foreign Commerce: For 1896, the silver ruble was valued at 31.9 cents; for 1897 and 1898, the gold ruble, 51.5 cents.

It may not be out of place to point out the methods successfully employed by other countries in selling goods to Russia. The French consul in Odessa, after speaking of the failure of catalogues, advertisements, and circulars to promote trade, notes that some large French houses have begun business upon an entirely new basis, with surprising results. The traveling agents brought their goods with them, avoided the middlemen and native agents, opened display rooms, called on the French consul, got a list of the people most likely to be interested, sent invitations to them to call, and sold them the goods. They went first to all the large cities, beginning with St. Petersburg, Moscow, etc., and then to towns of 10,000 or 15,000. The consul, of course, was not only willing to give the names asked for, but was eager to assist. In most cases, the goods were exhibited in the halls of the hotel in which the traveling agent stopped. The eagerness with which the parties invited accepted the invitation and the numbers that came indicated an unusual interest in the things exhibited. Of course, the prospect of buying direct from the manufacturers was the principal inducement. One agent sold in Odessa goods worth 25,000 francs ($5,000) in a week. A Paris carriage house exhibited several of its best makes. The results went far beyond expectations. It has always been my opinion that the United States consulates might be utilized for the exhibition of goods. Consulates generally have one or more rooms that could be employed for this purpose. I have tried to induce merchants and manufacturers to occupy some of my surplus space for exhibits, but up to date I have not been very successful. It is the best of all ways to get goods before buyers. No amount of advertising can equal it. The system did not originate with the French; it was inaugurated by our people in South America years ago.

J. C. MONAGHAN,

CHEMNITZ, *August 12, 1899.* *Consul.*

WESTINGHOUSE AIR BRAKES ON RUSSIAN RAILWAYS.

Consul-General Holloway, of St. Petersburg, under date of July 27, 1899, writes:

In transmitting the translation of the ministerial order requiring all standard Russian railways to equip their freight cars and engines with the Westinghouse air brakes by January 1, 1903, at a cost of several million rubles (this order provides that the introduction of other systems of continuous automatic brakes will only be allowed after a trial of three years), I desire to state that the Westinghouse

Company has erected a fine plant here, equipped with the latest improved American machinery, and is now employing a large force under experienced American engineers. The general manager is Mr. A. Kapteyn, of London, who is assisted by Mr. Walter Phillips, of Philadelphia, and by American experts in charge of the various departments.

This order involves the equipment of 300,000 cars, as well as a large number of locomotives, 60,000 of which are to be fitted with Westinghouse air brakes and 240,000 with air pipes and couplings inside of three years. This will place all the cars under control of the air brake, an improvement over the American system of making up trains of freight cars with and without air breaks, rendering it impossible to control the cars without the same.

Russia is the first country in Europe to use the continuous air brake for its freight and military trains.

While Russia began the development of its industrial resources much later than other nations, she is pursuing the policy of equipping her new factories with the latest modern machinery and adopting the most perfect methods of manufacture, as shown in the many new industrial plants in course of construction, which are almost without exception among the finest to be found in Europe. These are being assisted by the enterprise of Americans, who are beginning to appreciate and take advantage of the opportunities offered by this country.

The most important articles of the order are given below:

[Translation.]

INTRODUCTION OF CONTINUOUS AUTOMATIC BRAKES IN FREIGHT TRAINS OF RUSSIAN DIRECT-COMMUNICATION RAILWAYS WITH NORMAL 5-FOOT GAUGE.

MINISTRY OF WAYS OF COMMUNICATION, *June 19, 1899.*

ARTICLE 1. In virtue of the opinion of the State Council, recorded on the 30th of March, 1898, imperially sanctioned, continuous automatic brakes are to be applied to the engines and trucks of the freight stock circulating in direct traffic on the Russian system of normal 5-foot-gauge railways.

ART. 2. In conformity with the decision of the Ministry of the Ways of Communication and of the extraordinary congress of representatives of the service of rolling stock and traction, summoned in January of this year (1899), on the question of the choice of the fundamental system of continuous automatic brakes for freight trains, the Westinghouse system of brakes is adopted.

ART. 3. The introduction of other systems of continuous automatic brakes is allowed upon condition: (*a*) Of the previous trial of the new system on trains of local circulation, during not less than three years, for its thorough trial under the ordinary conditions of working; (*b*) of the possibility of the combined action of the new system with Westinghouse's system; (*c*) of the mutual interchangeability of the connections (couplings); (*d*) previous to the introduction of the new system into direct communication, the question of its practical suitability for this object is

to be considered by the congress of representatives of the service of rolling stock and traction, and the ratification of the conclusion of this congress is to follow the usual course.

ART. 4. The equipment of the freight stock with continuous brakes is to be carried out in the following sequence:

(*a*) In the course of the first four years, brake apparatus will be placed on all freight engines and tenders.

(*b*) In the course of the same period of time, main pipes will be placed on all freight trucks in direct traffic.

(*c*) In the course of the same four years, the wagons which have to be provided with continuous brakes will be equipped with foundation brakes, and the equipment of these wagons will be made complete, maintaining the hand brake, but the brake apparatus of the wagons must be taken down and kept in stock until the time when it will be fixed permanently to the stock.

(*d*) With a view to carrying into effect points *a*, *b*, and *c*, there will be ordered in the course of the first four years the necessary number of engine and carriage fittings, connecting tubes, and brake gear.

ART. 5. During the second period of time—*i. e.*, after the expiration of the first four years—all the brake trucks in direct traffic will be supplied with brake apparatus and guards' taps and all the carriages of direct communication (both braked and nonbraked) with rubber hose couplings, two to each carriage. The rubber hose couplings must be got ready in due time.

ART. 6. In the course of the second period of time, premises will be constructed for the storage of spare parts necessary for the maintenance and repair of the brake fittings, and the necessary number of spare parts provided.

ART. 7. On freight engines, first of all, the tenders will be equipped with brake apparatus.

ART. 8. Brake blocks will be applied to the driving wheels of the normal frieght engines after the necessary alterations in the construction of these engines have been made. The fitting of brake blocks to the driving wheels of freight engines of other types is left to the discretion of the local managements of the lines, depending on the construction of the engines.

ART. 9. The work indicated in article 8 will be proceeded with not earlier than after the complete termination of the work indicated for the second period.

ART. 10. The periods of time for the work indicated are: First period, from the 1st of January, 1899, to the 1st of January, 1903; second period, from the 1st of January, 1903, to the 1st of January, 1905; third period, from the 1st of January, 1905, to a date not predetermined.

ART. 11. When fixing the main brake pipe to the carriages, before the complete equipment of the brakes can be finished and until a decision has been taken as to the most rational means of preserving the connecting tubes from choking and rusting, these tubes will be stopped with solid wooden stoppers, and these stoppers cut flush with the edges of the tubes, so that they can not be taken out.

Remark.—It is allowed to bring forward, for the consideration of the next consultative congress of the representatives of the service of rolling stock and traction, the question of the application of some other more expedient means of preserving the connecting tubes from choking, until the time that the brakes are brought into use.

ART. 12. For the brake blocks of the engines, tenders, and carriages, the type of blocks of the normal goods truck will be adopted.

* * * * * * *

ART. 14. After communicating with the managements of the various lines, the number of braked vehicles of the nonnormal type which it will be expedient to

equip with air-brake apparatus will be indicated; and in conformity with these indications and the number of normal-brake carriages available on State and private lines, the building of new standard vehicles with brake will be arranged for, and the necessary credit asked for the State railways, and the necessary means found for the private railways, so calculated that by the 1st of January, 1903, there shall be on the various lines the whole number of braked vehicles required, as prescribed in article 24 of the present order.

ART. 15. For acquainting the staff of servants with the construction of the brake appliances of the Westinghouse system, and for the instruction of that staff in the operation and regular use of the brake, there will be used training or instruction carriages provided with drawings, models, and installations containing all the parts of the brake system and capable of being brought into action in the same manner as is done on the train.

Negotiations will be entered into with the Westinghouse Company for the preparation for the State railways of one such carriage, in order that, in the course of the first period, a tour may be made over the State lines in the said carriage by skilled persons from the said firm, for imparting to the staff of servants the necessary instructions.

The question of the introduction of such instruction on private lines is left to the discretion of the managements of these lines.

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ART. 19. Of the various systems of brakes tried by the brake commission, one superior system (not reckoning the Westinghouse system), admitting of harmonious action with the Westinghouse system, is to be introduced on the passenger trains of one of the railways indicated by the direction of the Ministry of the Ways of Communication, with the proviso that the brake system selected is to be subjected on the said line to trial and thorough test under the ordinary conditions of working during a period of three years, after which the question of the expediency of adopting this system for the goods-carriage stock will be considered.

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ART. 24. The number of freight cars in direct traffic to be equipped with complete brake apparatus must be in accordance with the rules now in force for hand brakes (20 per cent).

ART. 25. The equipping of the freight stock of the Transcaucasion Railway with continuous automatic brakes is to be carried out independently of the present rules, viz, the engines, tenders, and vehicles of this road to be provided simultaneously with complete Westinghouse-brake apparatus, pressure-retaining valves, brake-gear connecting tubes, intercarriage hose couplings, and guards' taps.

The number of braked axles to be established in accordance with the profits of the road.

The brake-block pressure to be established in accordance with article 13 of the present order.

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ART. 29. Private railways are allowed to order brake apparatus of the Westinghouse system, according to their discretion, in whole sets or in separate parts and to give these orders either through the management of the State railways or by independent contract, as may be found of most advantage to them.

The drafts of independent contracts concluded by the managements of private railways for the supply of the above-mentioned brake apparatus must be presented for approval to the Ministry of Ways of Communication, with a detailed explanation of the reasons on account of which the management of the road prefers ordering by independent contract and not through the intermediary of the State railways department.

At the same time, the managements are forewarned that they can reckon on the approval of the ministry of the said draft contracts, only in case there should be incontestable advantages in doing so as compared with ordering the same articles through the intermediary of the State railways department.

ART. 30. There will be communicated to the managements of private railway companies, for their information, a copy of the contract concluded by the State railways department with the Westinghouse Company.

RUSSIA'S ACREAGE IN BEETS IN 1899.

Vice and Deputy Consul-General Heydecker sends the following from St. Petersburg, July 31, 1899:

The area devoted to the cultivation of beets in European Russia at the end of May, 1899, amounted to 1,212,972 acres, against 1,083,758 in 1898, an increase of 129,214 acres, or 11.9 per cent; of that amount 801,935 acres belonged to the planters and 411,040 to factories. The following table shows the number of acres under cultivation in the beet-growing governments:

Government.	1898.	1899.	Increase.		Decrease.	
	Acres.	*Acres.*	*Acres.*	*Per cent.*	*Acres.*	*Per cent.*
Bessarabia	3,024	2,911	.....	.....	113	3.75
Volyn	60,915	73,318	12,403	20.36	.....	.....
Kief	292,826	332,351	39,525	13.49	.....	.....
Podolia	251,203	288,398	37,195	14.8	.....	.....
Kherson	13,403	21,465	8,062	60.15	.....	.....
Voronezsh	27,610	25,458	.....	.....	2,152	7.79
Kursk	107,776	127,067	19,291	17.89	.....	.....
Orel	6,321	8,213	1,829	29.94	.....	.....
Poltava	6,307	6,048	.....	.....	259	4.1
Samara	7,187	7,322	135	1.87	.....	.....
Tambov	15,082	16,003	921	6.1	.....	.....
Kharkof	124,859	130,942	6,083	4.87	.....	.....
Tula	3,348	3,143	.....	.....	205	6.12
Cherningov	42,649	42,055	.....	.....	594	1.39
Warsaw	57,370	58,865	1,495	2.6	.....	.....
Kalish	9,006	9,156	150	1.64	.....	.....
Kelets	6,885	6,413	.....	.....	472	6.86
Lomszha	2,848	3,410	562	19.71	.....	.....
Lublin	20,611	26,244	5,633	27.32	.....	.....
Petrokov	4,455	4,833	378	8.48	.....	.....
Plotsk	10,103	9,607	.....	.....	496	4.91
Radom	5,465	6,426	961	17.58	.....	.....
Sedletsy	4,504	3,321	.....	.....	1,183	26.25
Total	1,083,757	1,212,972	129,972	11.92	.....	.....

RUSSIAN TAXES ON TRADE AND COMMERCIAL TRAVELERS.

The Department has received from Ambassador Tower, under date of St. Petersburg, July 24, 1899, translation of the provisions of the Russian law of June, 1898, in regard to taxes on manufacture and trade and the granting of permits to commercial travelers to transact business in Russia. The law reads:

Such commercial houses only shall have the right to employ commercial travelers in Russia as have paid the tax of the first class, and such manufacturing industries only as have paid the taxes of the first three classes.

This applies equally to commercial houses and manufacturing industries that have or have not establishments of their own in Russia.

The first-class tax for commercial houses is 500 rubles ($257); those for manufacturing industries are 500, 1,000, and 1,500 rubles ($257, $515, and $772).

In addition to this, each commercial traveler is required to pay an individual tax of 50 rubles ($25.75) per annum.

Manufacturing industries which have no factories of their own in Russia, but carry on a wholesale trade within the Empire through the medium of commercial travelers, are classed with commercial houses; they pay a tax of 500 rubles, therefore, instead of those, ranging from 500 to 1,500 rubles, provided for manufacturers.

The taxes upon manufacturing and trading are assessed according to the official permits granted for the purpose of carrying on either manufacturing industries or trade within the Empire. Therefore, a commercial traveler who wishes to obtain an individual permit to do business in Russia must show as his authority either the original permit of his principals or a legally certified copy of it.

No commercial traveler will be allowed to transact business within the Empire as representative of a commercial house or manufacturing industry until such commercial house or manufacturing industry shall have obtained the prescribed permit, which is to be done either by an application made directly by the principals themselves or by an authorized commercial traveler in their behalf.

Manufacturing industries and business houses which have obtained the prescribed permit to carry on their business within the Empire may employ any number of commercial travelers they see fit, provided that each of such commercial travelers shall pay an annual tax of 50 rubles for that purpose and shall obtain an annual permit.

WORK ON SIBERIAN RAILWAY.

Mr. Hagerman, second secretary of embassy at St. Petersburg, sends, under date of July 17–29, 1899, the following translation of an article from the Novoe Vremia:

Each year the Great Siberian Railway draws the attention of State officials, and this year Prince Hilkoff, Minister of Ways of Communication, and Mr. Miasoiezdoff-Ivanoff, the newly appointed director of Russian railways, have just inspected the

line in question. Both were called there to decide questions of the utmost importance. Two portions of this line may be said to be in operation. The amount of traffic on the line between Tcheliabinsk and Irkutsk is:

Description.	1896.	1897.	1898.
Passengers	244,000	512,000	948,000
Freight .....tons...	191,666	441,666	616,666

During the first two months of the present year the freight transported on the Great Siberian Railway amounted to 14,000,000 poods (233,333 tons); and in the month of May, on the Central Siberian Railway alone, 1,200 cars of freight were waiting two months for their turn, being directed to a famine-stricken district in the direction of the Trans-Baikal. During the first two months of the present year 150,000 workmen and settlers were carried along the Siberian line.

The power of economic impulse given to the great line can be seen in many ways. In the center of great ranges of mountains rich coal mines have been discovered and are already being exploited by several large companies. Small villages are becoming towns. On the other hand, certain industries (that of the caravan, for instance) are falling off; and as a proof that the railway is to do a great work, nine wooden bridges on the line have been burned down since last spring. This crime is laid to the principal carriers, or caravan proprietors, who find no more work since the railway has been inaugurated.

A serious misfortune occurred in the year 1897 in the Trans-Baikal district, which was completely flooded. This occasioned not only a famine, but the necessity of making a new project of the line for the railway for a distance of over 1,000 versts (666 miles). This flood was followed by famine, bringing with it great disaster and much disease.

The above résumé indicates that radical changes must be made immediately.

First, means must be organized to meet the mass of passenger and freight traffic. The great railway never expected such success, and has been built economically—steep hills, sharp curves, light rails, a limited quantity of rolling stock of bad quality, and a still more limited number of employees. In a word, all was prepared for a sleeping country, to which gold alone could entice. What must be done now? It will be to change the light rails for heavier ones, to renew the roadbed, to lengthen and to increase the number of sleepers; also to build switch stations at small intervals on the line in order to increase the number of trains, and to change the wooden bridges for iron bridges. It has also been found absolutely necessary to build large warehouses to preserve cereals at various points along the line.

Below is a general view of the Great Siberian Railway, as reported by all who have inspected it.

On the western portion of the line, since its inauguration, 29 new switches have been built, and 10 others are being built at the present time; in all, 41 will be built. This will permit of the running of 10 trains a day. On this portion of the railway the 50 wooden bridges which existed are being replaced by iron bridges. The long-expected iron bridge over the Yenisei is now ready; it is 2,800 feet long and 420 feet wide. It is considered one of the finest pieces of engineering ever executed. In order to overcome the heavy grades on this railway, it has been supplied with locomotives of the Malet system. Unfortunately, this portion of the railway can not operate more than 5 pairs of trains a day, and that is why the Minister of Ways of Communication found this mass of goods waiting its turn for the last two months.

On the Trans-Baikal line nearly all the grading is ready and the rails are laid for 550 versts (366 miles) from Strietensk and 70 versts (46 miles) from Muisoff; the total length of this section of the railway is a little over 1,000 versts, or 666 miles. Thus, it is expected that by June of next year this section of the line will be in operation. Ten thousand workmen and convicts are working at the Chinese section of the line, which it is expected will be completed in three years.

RESOURCES OF ASIATIC RUSSIA.

Siberia and the Amur lands are rich beyond belief. Their 13,400,000 square kilometers (5,213,956 square miles) are inhabited by only 4,000,000 souls. In recent years, however, the number of immigrants (400,000 last year) has been equaled only by the tide which poured into the United States in the past. This vast territory, long looked upon as a barren waste, is destined to be one of the world's richest and most productive sections. In northern France, wheat ripens in 137 days; in Siberia, in 107. Even heavy night frosts do not injure the young seed. Under such conditions, the possibilities of agriculture are practically unlimited. I may add that oats require, in Siberia and in the Amur country, only 96 days, and in the regions of the Yenisei only 107. The frost period lasts only 97 days in the Irkutsk country. Transbaikalia lies entirely within the agricultural regions; so, too, almost the entire territory traversed by the Amur as far north as it runs. Efforts are being made to obtain along the Amur at least 300,000 square kilometers (115,835 square miles) for the higher forms of northern agriculture. Climatically, the best of northern Asia's territory, for planting purposes, is the Usuri country, which, in spite of its vast tracts of wood and grazing lands, has 195,000 square kilometers (75,292 square miles) of arable ground. The building of the Trans-Siberian Railroad has already added to the Empire's wheat product.

The mineral resources of western Siberia are vast. Between Tomsk and Kooznesk lie 60,000 square kilometers (23,167 square miles) of coal lands which have never been touched. The coal is said to be excellent. In eastern Siberia, with its 280,000 square kilometers (108,112 square miles) of fruitful soil, there are 400 places yielding gold. Rich mineral deposits—graphite, lapus lazuli; iron mines, particularly rich in quality (as high as 60 per cent); hard and soft coals, *i. e.*, black and brown coals—await hands willing to work for them. To-day, thousands of colonists are hurrying to these promising lands. Russia's output in gold and silver is already very large, and is constantly increasing. Three-fourths of all the silver gathered in Russia is obtained in the Altai Mountains. Exclusive of the Ural gold fields, there are 851 places in the Empire where gold is found.

Notwithstanding the number of places in which iron is located, there are only four large establishments for its production. The ores are rich—38 to 60 per cent of raw iron.

The industries of Siberia are in their infancy; still, they are growing and are bound to grow, so rich are the rewards promised. Chemical, sugar, and paper mills have been put up in several places and are paying well. Even Manchuria, a province so vast that it might make an empire, is looking to Russia for its future development. The wealth of this province, like that of Siberia and all eastern Russia, is ripe for harvesting. The traffic in Siberia and eastern Russia is increasing faster than even the advocates of the great Trans-Siberian road anticipated. The Ob, one of the world's big rivers, emptying through the Gulf of Ob into the Arctic Ocean, has 102 steamers and 200 tugs running already. On the Yenisei, 10 steamers carry the mails regularly. The mouths of both these rivers were visited last summer by English and Russian ships. This proves the practicability of connecting eastern and western Siberia with Europe by water. The mouth of the Ob is to be deepened and wharves are to be built. On the coast of the Usuri country there is regular postal communication between Nicolaiev, Vladivostock, and intervening places, as well as connection with Japanese ports and Port Arthur. From Odessa and St. Petersburg to various Asiatic ports runs the so-called volunteer fleet, established in 1878. It has 14 steamers with 115,500 tons displacement. In war they can be armed; in peace they carry freight, travelers, immigrants, and troops.

Siberia and the Amur country possess advantages very similar to those of North America, Australia, and parts of Africa. The great gain to Russia at present, in developing Siberia, is the guaranty that her harvests will come nearer to supplying her wheat needs.

J. C. MONAGHAN,

CHEMNITZ, *July 31, 1899.* *Consul.*

TRADE REGULATIONS AT TALIENWAN: NEW SIBERIAN CITY.

Ambassador Tower transmits from St. Petersburg, under date of August 23, 1899, translation of a decree issued by the Emperor on July 30 (as published in the St. Petersburg Journal of August 4–16) in regard to the regulation of commerce at Talienwan, as follows:

To the Minister of Finance:

Our Empire, which comprises immense territories in Europe and in Asia, has been summoned by Divine Providence to contribute toward the friendly intercourse of the people of the Occident with those of the Orient. In attaining this historical

object, we have had the friendly cooperation of the Emperor of China, who has ceded to us the use of the port of Talienwan and of Port Arthur and has opened to us through his possessions an outlet for the great line of railway from Siberia to the Yellow Sea. Thanks to this wise decision of the Government of His Majesty the Bogdokhan, the extreme limits of the two continents of the Old World will soon be united by a continuous line of rails which will secure to all nations the incalculable advantages of easy communication and will bring new regions into the general development of trade.

In our constant solicitude for this undertaking of such general usefulness, we have carefully considered what a position of the greatest importance the starting point of this line—Talienwan—will occupy when the road has been constructed. As we declared at the time of its occupation that this port should be open to the commercial fleets of all nations, we have now decided to begin the erection near to it of a city, which we shall call "Dalny."

At the same time, in view of the commercial development of the future city, we confer upon it for the whole term during which that territory has been leased to Russia by China, under the agreement dated the 15–27th of March, 1898, the rights of free trade which belong to free ports, upon the following conditions:

I. The right to import and export merchandise of every description free of customs duties is established in the city, in the port, and in the adjacent territory up to a fixed boundary line, which may be changed by the Minister of Finance.

II. The right of free trade thus established shall not affect the tolls for carriage or for anchorage or other taxes of various kinds that usually obtain in seaports.

III. Quarantine regulations for the exclusion of contagious diseases shall be applied in full force to ships entering the port.

IV. Merchandise imported into Russia and coming from the territory to which the right of free trade is thus extended shall be examined and shall pay such duties upon entering the limits of the Empire as are provided for by the general laws which govern the importation of foreign goods.

Invoking the blessing of God upon this future undertaking, so truly peaceful, I take upon myself the care of building the new city and its port.

NICHOLAS.

PETERHOF, *July 30, 1899.*

IRON BEDSTEADS FOR THE ORIENT.

Although statistics show us that American hardware is finding a rapidly increasing market abroad, there has as yet been but little imported into Formosa. The foreign population of the island numbers but some three dozen persons in all, and, of course, their requirements are very slight. American manufacturers must then look to the Japanese and Chinese population for their customers. Unfortunately both Chinese and Japanese carpenters still cling to their very primitive home-made tools. Although the more intelligent among the Japanese people are quick to purchase labor-saving machinery if the expense is not too great and they are convinced work can be done by it cheaper and quicker than by hand, this spirit of enterprise does not apparently extend to the carpenter, or even to the blacksmith and lower-class artisans who live in the interior and feel but little the influence of foreign customs.

I have visited several of the large hardware shops in the city, and with the exception of nails, bolts, screws, locks, hinges, and shovels, I have found no foreign goods.

Although there is but little to be done in hardware, it is my firm belief that a good opportunity exists for the introduction of American iron beds, not only in Formosa, but throughout the East, providing the home manufacturers are willing to make the slight modifications required in producing an acceptable article.

The American iron bed, enameled in white and with brass trimmings, is superior in appearance to the English or continental bed found for sale in the East; and, although in every way equal in strength and firmness, it is manufactured in America at such a low cost that it can be placed on the Eastern market at about half the cost of the European article. The plague of insects is so prevalent in the East, and wood is so easily injured by the excessive damp, that wooden bedsteads find but little favor. The form of bed most suitable for use in tropical countries differs from the present American model in two respects, *i. e.*, the body of the bed must be raised so as to be 2 feet clear of the floor, and the four posts must be extended to a length of 7 feet. A mosquito net is used the year round in most tropical countries, and although an ingenious canopy arrangement, to be suspended from the ceiling, can be obtained in the United States, the only really satisfactory net is the one supported by the four bedposts, independent of outside fixtures. The four posts should be connected at the top by light rods, bent at each end into a ring, which can be dropped over a pin which projects from the top of each post and which also affords a hold for the brass knobs which are to be placed on top. This frame forms a support for the mosquito net, which is either fastened to the rods with loops or is drawn over the whole frame. An English or continental double bed of this kind sells in the East for from 40 to 50 yen ($20 to $25).

Although foreign-style beds are but rarely used by Japanese in Japan proper, well-to-do Japanese in Formosa use them quite extensively, as they recognize that in this damp climate it is more healthful to sleep above the floor than on the "tatami," as is done in Japan. In some of the Government institutions—especially the hospitals, of which there are several large ones in Formosa—foreign iron beds are used exclusively. The largest market, however, would be in supplying the thousands of foreigners who reside in the various foreign settlements throughout the whole East.

JAMES W. DAVIDSON,
Consul.

TAMSUI, *August 1, 1899.*

CAMPHOR MONOPOLY IN FORMOSA.

I inclose a clipping from the Japan Mail of this date, descriptive of the new camphor monopoly established by the Japanese Government in the Island of Formosa.

Regulations were issued by the Formosan Government on the 22d of June. The scale of prices to be paid by the Government for camphor purchased is shown below.

Scale of prices.

Office.	Camphor, per picul (133⅓ pounds).						Camphor oil, per picul (133⅓ pounds).	
	Superior.		Medium.		Common.			
	Yen.		*Yen.*		*Yen.*		*Yen.*	
Taipeh	30.00	$14.94	27.00	$13.45	24.30	$12.10	15.00	$7.47
Shinchiku	29.00	14.44	26.00	12.95	23.50	11.70	14.50	7.22
Byoritsu	27.50	13.70	24.80	12.35	22.30	11.11	13.80	6.35
Taichu	26.00	12.95	23.40	11.65	21.10	10.51	13.00	6.47
Rinkiho	22.00	10.97	19.80	9.86	17.80	8.86	11.00	5.48
Rato	27.50	13.70	24.80	12.35	22.30	11.11	13.80	6.35

Kelung and Tamsui have been designated ports for the shipment of camphor.

JOHN F. GOWEY,
Consul-General.

YOKOHAMA, *July 13, 1899.*

CAMPHOR MONOPOLY OF FORMOSA.

The Government's scheme for a camphor monopoly in Formosa has now been reduced to working form and embodied in a series of regulations. The Government is to receive from manufacturers all the crude camphor and crude-camphor oil produced in the island, the possession, hypothecation, transfer, or export of all other camphor or camphor oil being interdicted, and the ports of export strictly limited. As to the price paid by the authorities to the manufacturers, it is to be fixed by the governor-general. Manufacturers are required to render to the Government every year a report of the anticipated amount of production, and for failure to do so, or for furnishing a false report, the penalty is a fine of from 10 to 100 yen.* Officials connected with the monopoly are to have the right of visiting and inspecting stills and stores, and of enforcing suitable measures of control. The penalty for selling or exporting camphor independently of the Government is heavy, namely, confiscation of the camphor and a fine of from 50 to 500 yen. Adulteration is punishable by a fine of from 10 to 100 yen, and so is the making of a false declaration or neglecting to make the required declaration.

Simultaneously with the issue of the regulations embodying the monopoly

*The value of the yen is 49.8 cents.

system, another set of rules relating to the manufacture of camphor were promulgated. They provide that anyone desirous of manufacturing camphor or camphor oil must obtain official permission; that failure to commence the manufacture within the period prescribed in the permit may involve cancellation of the license; that the governor-general shall have competence to suspend a manufacturing business or revoke a license, should such a course seem necessary in the public interest; that a manufacturer forfeiting his license or discontinuing his business shall return to the Government any camphor wood remaining on his hands, suitable compensation being paid to him in the latter case; and that penalties of from 10 to 500 yen shall be imposable for violations of these rules. It is satisfactory to observe, however, that vested interests are respected. The last article of a set of supplementary regulations provides that persons who have received a license to manufacture camphor under the regulations issued in 1895 and 1896 shall be regarded as already possessing the permission indicated in the regulations.

FREIGHT FACILITIES FROM ATLANTIC PORTS TO CHINA.

Consul-General Goodnow, of Shanghai, on July 22, 1899, transmits a letter from a Shanghai firm, taking issue with the statement in an American trade journal that trade is hindered by the lack of transportation facilities between the Atlantic seaboard and China, and that freights are frequently forced to go via Europe, in spite of higher rates, through the action of a combination of steamship companies and shipping brokers. The letter claims that ample facilities now exist for the shipment of cargo from New York to China and Japan via Suez, and quotes rates of freight as varying from 22s. 6d. to 27s. 6d. ($5.46 to $6.68) per ton of 40 cubic feet, against 45s. to 50s. ($10.93 to $12.15), charged by steamship owners from London and Liverpool to same destination. 'Daily customs returns, it says, show that nine steamers from New York have discharged at Shanghai 21,500 tons measurement of cargo during the six months ended June 30, 1899. Although a considerable portion of the more valuable cargo destined for the Eastern States is shipped via the Pacific coast and railroads, no fancy rates are charged by the Pacific lines, and tea can be shipped to-day via San Francisco and reach New York in about thirty-five days for the equivalent of 40s. ($9.72) per ton of 40 cubic feet; while the rate charged by Suez steamers, occupying sixty to seventy days on the voyage, is 27s. 6d. ($6.68). The letter concludes:

We venture to say that during the past three years, no shipments to New York of any importance have been made via Europe. In former years, shippers of tea sometimes used that route in order to have the option of offering their produce in both markets; but as at present the rate to New York via London or Hamburg is 55s. ($13.36) against 26s. 6d. ($6.43) direct, no merchant in his right mind would ship by the indirect route.

MOTOR VEHICLES IN SHANGHAI.

In reply to inquiries from a Chicago firm,* Consul-General Goodnow writes from Shanghai, July 10, 1899:

I would advise that catalogues and dealers' net prices be sent to the following American firms in Shanghai: American Trading Company, Mustard & Co., Dunning & Co., China and Japan Trading Company; Fearon, Daniel & Co.; Wisner & Co., Frazar & Co., and A. W. Danforth. It will probably be found feasible, after correspondence, to make one of these firms an exclusive agent.

This is an ideal place for motor vehicles. The town, built on alluvial deposit in the mouth of the Yangtze River, is level. The roads are macadamized, and the climate is such, especially in the summer, that everybody drives. The horses are small, about the size and character of our Indian ponies. The foreigners are comparatively few (say 5,000 men, women, and children); but there are nearly 500,000 Chinese in the settlements, and these take very kindly to our mechanical inventions as soon as they see them. Shanghai, also, is the distributing point for central and northern China. The merchants from the other treaty ports come here to buy their goods. Arrangements should be made to show vehicles, and to make a practical everyday demonstration of their ease of management and durability.

The Chinese will not buy goods without having seen them. The average Chinese has seen so few new things that it is not easy for him to exert his imagination. Foreigners here are also slow to buy motor vehicles. The prices are considered high, and many think of the vehicles as experimental playthings. Neither the foreigners nor the Chinese can be induced to buy by descriptions or catalogues. There have been one or two auto motors shown here, but they were of an inferior type and manifestly unfit for either use or pleasure.

This is the best time to push this trade in Shanghai, as there are no street railways here and the city is growing so rapidly that need is felt for more rapid transit.

There are two ways to advertise these new vehicles. One is to send a machine to some person well known here, who will use it constantly, demonstrating the fact that it can be used by an amateur for pleasure at a cheap running cost. I am inclined to think myself that this would be the better plan. It must be remembered that the cost of transportation in Shanghai differs from that in Chicago. Here, a carriage with two horses, driver, and footman can be hired for $75

*Advance Sheets have been sent the firm.

Mexican (say, $36 gold) per month. Or if one owns ponies they can be fed for $6 Mexican each per month, and the driver and footman can be hired for $17 Mexican (for the two) per month. It would be necessary, under this plan, to practically give the use of a vehicle to some well-known person who would use the same constantly and keep it in repair. It may be possible that a like result would be reached by placing the vehicles on exhibition with one of the above-named firms; but if it is desired to get a part of the Chinese trade—which is immense and is thoroughly interested in American mechanical inventions—I would strongly urge that one or more machines be shown on the streets here, in such a manner that the Chinese will know that they are used by Americans of a position that will guarantee their desirability as vehicles of use, pleasure, and fashion.

AMERICAN TRADE INTERESTS IN HONGKONG.

Since the opening of Manila to the markets of the world, the competition for the control of its prospective trade has been growing keener from month to month. As a result of the war, the eyes of the world have been turned towards the Philippine Islands and China. The British chambers of commerce in England early realized that their trade supremacy in the Far East was soon to be contested by the United States. They sent to China Lord Charles Beresford as their representative, who appeared before all the chambers of commerce on this coast and told them plainly that if England wished to maintain her commercial prestige in the Far East her resident merchants must cooperate actively with the English manufactories at home, and the English steamship companies must be prepared to make some little sacrifices for a time, in order to meet the changed conditions brought about by the new competitor in the field. During the tour of this celebrated Englishman, there was a great deal said on political topics, and the "open door" and "sphere of influence" were exhaustively discussed; but I believe that the great benefit to be derived from Lord Charles Beresford's visit will be commercial rather than political, and that the energetic stirring he gave to the lethargic waters of British trade will have a lasting effect. America has also had a commission on this coast, sent out by the Philadelphia Museums, which, while it worked in a quieter way, will be of immense advantage to our exporters. Its representatives made themselves as well acquainted as possible with the complex conditions of Asiatic trade, and returned to America with their minds filled with the needs of this coast and with the general principles which govern trade relations here. If I may

be permitted to make a comparison between the trade operations of the English, Germans, and Americans, I would say that the Americans are less daring and less confident than the other two. The idea of even our largest manufacturers seems to be that they can commence on this coast in a small way and build up with the expectation that their ventures ought to pay from the start. There is only one way for American manufacturers to win their way here, and that is to thoroughly study the market, decide whether their goods are suitable, and then establish a house or agency large enough to command the respect of the great Chinese hongs and the consideration of the English and German firms that have been established here for years.

While I am not a merchant, I have been a student of trade conditions here for nearly nine years, and if I were asked to outline a plan of campaign for an American firm or an association of firms who are willing to spend a little money to test this market, it would be as follows: The firm should send a thoroughly competent business man, a gentleman who could meet gentlemen on an equal footing at clubs and at dinners. He should bring letters that would be received with respect by the heads of the big banks and the firms. A salaried commercial man or an employee would be of little value, as he would not be kindly received by the class of men that it would be to his interest to meet. There are certain requirements of the trade that are peculiar to this coast and to this climate that would require his serious study and attention. I dwelt upon this fact at some length in my annual trade report to the Department, dated October 20, 1898, which should be read in connection with these remarks.* In addition, I will here call attention to a phase of the Chinese trade that does not seem to be thoroughly understood or appreciated. For example, we will admit that the American manufacturer has a class of goods that would be acceptable to the consumer on this coast—possibly it may be piece goods. He persists in shipping it here in lengths and with chops, or trade-marks, that are suitable to American markets. The Chinese merchant refuses to accept such parcels, as they would "cut to waste" in the manufacture of Chinese clothes. The wide-awake American, who should be sent out to study the trade conditions, can adopt a trade-mark, or chop, which would be satisfactory, and further meet local views as to sizes and quantities. I do not mean that the Chinese are always fair in their objections. These are sometimes simply tricks to depress the market; still they must be met.

After the American firms have decided to enter this market, I would earnestly advise them to establish a big wholesale and retail

*See Commercial Relations, 1898, Volume I, p. 1059.

emporium in Hongkong, the larger and more complete the better. It would have to be on modern lines, modeled to some some extent upon our large establishments in the United States. If the store were made attractive, Chinese from all over the coast would flock in; and, as they never buy without first seeing the article, the advantage of such an arrangement would be immediate. Of course, this would require very large stocks to begin with, as selling to Chinamen by samples is impossible. As an instance of the classes of goods that would be salable in such an emporium, I might mention all kinds of cotton goods that are suitable to this climate, canned meats, fruits and vegetables, bottled beer, gunpowder, cheap lamps, bicycles, sewing machines, flour, kerosene, jewelry, engines and boilers for small steamboats, electric fans (direct current), wire rope, baled cotton (short staple), ship and roofing paint, asbestus, and all kinds of ship chandlery. In addition to these and many other articles, this city would support, in connection with such an establishment, a first-class retail store for the benefit of Europeans, which should embrace dry goods, furnishing goods, stationery, music, fishing tackle, sporting arms, racing outfits, and all kinds of provisions, including fresh butter. A leading capitalist told me, a few days ago, that such an establishment would be a success from the start, and would be the means of introducing American goods to the Chinese market more rapidly than any number of letters or small consignments. It must be a distinctly "American store," run by intelligent men, who would be satisfied only with a very large volume of business. Further, my informant said that when the business had once been established on a permanent footing, it would be very easy to incorporate it into a limited-liability company, floating it entirely in Hongkong.

Within the last year, an American commission house has been established here—F. A. Blake & Son—which represents half a dozen or more California firms. It has met with gratifying success, and I hope may be the beginning of a larger enterprise. People are learning to appreciate American goods, and our manufacturers are finding out that they can compete in this market by sending over their surplus at a special export price. One of the leading architects here, writing to me on the subject of American competition, says:

> American manufacturers are, as you know, cutting into British and German trade here. In some tenders we received a few weeks ago for a large steel wharf, there was a difference of only £66 ($320) between the lowest tender (British) and the next lowest (American)—the former being f. o. b. Liverpool; the latter, f. o. b. New York. Had the price been c. i. f. here, the American tender (Carnegie's) would have been the lowest, owing to freight being cheaper here from New York than from Liverpool. The wharf was let for about £7,500 ($36,450).

The new mills of the Hongkong Cotton Spinning, Weaving, and Dyeing Company, Limited, will be in operation within a few days. This is the first cotton mill erected in Hongkong. For the last two months, between 800 and 900 hands, mostly women and girls, have been learning the mysteries of spinning cotton. The mill is fitted up with the very latest machinery, made in Oldham, England. There will be about 50,000 spindles, of which 8,000 are already at work. It is understood here that they are preparing to erect a plant for a duplicate mill, and the representative of an American firm, who was here figuring upon the proposition, told me that he could outfit the new plant for $150,000 less than they paid for the old one. As I have said in previous reports, this new industry will create a big demand for American "upland" cotton. The only thing that the promoters of this English industry fear is that mills will be established in Manila, which would only be possible if Chinese labor were admitted freely.

The exports from this colony to the United States are steadily increasing. The exports for the quarter ended March 31, 1899, amounted to $1,565,610 gold, as against $718,030 in the corresponding quarter of 1898. While the bulk of these exports are in Chinese goods, there are a few items that may be of general interest—for example, matting, $89,330; rattan ware, $21,990; hemp, $133,490; rice, $325,250; refined sugar, $165,840; hard-wood furniture, $24,185. In addition to these, sundry provisions were invoiced in this consulate for Manila, amounting to $398,230. This last item is an object lesson in itself, as every article should have been sold by American firms.

ROUNSEVELLE WILDMAN,
Consul-General.

HONGKONG, *July 31, 1899.*

TREATMENT OF FOREIGNERS IN FORMOSA.

The Department has received from Minister Buck, of Tokyo, under date of August 11, 1899, a copy of regulations concerning the treatment of foreigners in Formosa, as follows:

ARTICLE I. One who has a foreigner lodging at his house shall notify the police office concerned in regard to the following points within twenty-four hours (the name, status, and name of domicile in foreign country shall be added in the original language): (1) Full name, (2) nationality, (3) status and profession, (4) age, (5) domicile or residence (when he has neither, his residence in a foreign country), (6) where he came from, (7) date (including hour) of his arrival.

When the foreigner, described in the foregoing paragraph, has left the house, the landlord shall within twenty-four hours notify the police office concerned the date (including hour) of removal and place to which he has removed or traveled.

The hours allowed for the notification in the first and second paragraphs may

be shortened by regulations of the prefectural government in case of those who have foreigners lodging with them on account of their being hotel keepers or of their having business of that kind. The notification mentioned in the first and second paragraphs may be made to the branch police office or the police official on his rounds, except in cases specially provided for in the regulations of the prefectural government.

ART. II. When a foreigner is requested to do so by the proprietor or manager of the house where he is lodging, he shall state the facts in relation to himself or his companions, which ought to be declared according to the foregoing article, or shall fill out the papers which the proprietor or manager may hand him.

ART. III. The foreigner who has a house, or one who, though not having a house, resides in the same gai, sho, or sha, with the purpose of living there for more than ninety days, shall, within ten days from the date of beginning residence, notify the police office concerned of his or his family's domicile or residence, date of beginning residence, former residence, residence in foreign country, the facts mentioned in Nos. 1–4 of the first paragraph of Article I, and the relationships of his family to him.

The foreigner who, though not answering to the foregoing paragraph, has lived in the same gai, sho, or sha for more than ninety days shall send notice according to the foregoing paragraph within ten days after the ninety days.

When the foreigner does not retain a house, the landlord of his lodging place, and when the foreigner retains a house, the owner or agent of the house, shall also sign the statement mentioned in the first and second paragraphs.

A denationalized Japanese subject continuing to reside in the same place need not send notification according to the present article.

ART. IV. The police office shall prepare a record of the registration of foreigners and register in it the facts stated, according to the first and second paragraphs of Article III, Article V, and Article VI. When, though not stated, the facts required in the registration are known, the same process shall be gone through.

ART. V. When the foreigner registered in the record of registration of foreigners moves, one of the following persons shall, within ten days, notify the police office concerned of the date of removal and the place to which he has removed. When one who moves notifies in person, the notification shall be made before the removal.

(1) When a foreigner who is in a lodging moves, the person who has had the foreigner lodging at his house.

(2) When the family of a foreigner who retains a house has moved, the foreigner himself.

(3) When a foreigner who retains a house moves, and his family remains at the house, the adult who should be the head of the house; if there is no such person, the oldest among the adults.

(4) When not answering to the foregoing categories, the owner or manager of the house.

ART. VI. The foreigner registered in the record of registration of foreigners, when there occurs a change in the facts registered concerning himself or his family, shall notify to that effect the police office concerned within ten days from the date of the change.

ART. VII. Anyone who pays the following fee can apply to look over the record of the registration of foreigners or for the delivery of a copy of the registration:

(1) For looking over, 5 sen (2½ cents) each time for a family.

(2) For copy of registration, 10 sen (5 cents) per sheet.

ART. VIII. The foreigner shall reply, when he is asked by the police official in relation to the facts specified in Article I or the facts which ought to be registered in the record of registration of foreigners; he shall show his passport that he car-

ries, or other documents certifying his nationality when he is requested by the official to do so.

The foregoing provision applies to cases where the police official questions the foreigner concerning the Japanese with whom the foreigner has lodged.

ART. IX. The governor-general of Formosa can expel from Formosa those foreigners to whom one of the following conditions apply:

(1) One who can not obtain his livelihood.

(2) One who wanders about from place to place without any fixed abode.

(3) Beggars.

(4) One who is seen to contribute to the disturbance of peace and order, or to the injury of morals.

(5) One who has come to Formosa again without permission after he had been expelled.

The order of banishment can be compulsorily carried out, either after the punishment of Article X or without applying Article X.

ART. X. One who, being ordered to leave Formosa according to Article IX, does not leave within the appointed time and one who comes to Formosa again without permission after he has been expelled are to be condemned to not more than four months' imprisonment or not more than 50 yen ($24.90) fine.

ART. XI. One who violates Article VIII by not obeying the request of the police official, by not answering the official's questions, or by not giving the facts, shall be fined not more than 20 yen ($9.96), except in cases to which the penal code is applicable.

ART. XII. One who does not send the notices mentioned in the first and second paragraphs of Article I, Article II, the first and second paragraphs of Article III, and Articles V and VI is to be fined not more than 1.95 yen (97 cents); and one who does not state the facts is to be fined not more than 20 yen ($9.96), except in cases to which the penal code is applicable.

One who has violated the third paragraph of Article III is to be fined not more than 1.95 yen.

ART. XIII. The time allowed for the notification stated in the first and second paragraphs of Article III with regard to foreigners who are actually living in Formosa when this regulation comes into force is counted from the date of the operation of this regulation.

One who actually has a foreigner lodging with him when this regulation comes into force shall bring forward the notification mentioned in the first paragraph of Article I.

ART. XIV. The treatment of Chinese laborers and Chinese without any regular occupation is dealt with in another ordinance.

REGULATIONS RELATING TO FOREIGNERS IN JAPAN.

Minister Buck, of Tokyo, under date of July 29, 1899, transmits printed translations of new notifications and regulations issued by the Japanese Government relating to foreigners, as follows:

REGISTRY OF IMMOVABLES.

IMPERIAL ORDINANCE NO. 329 OF JULY 7, 1899.

(1) If a right in an immovable which might be set up against third persons has been duly acquired by an alien or a foreign juridical person before the time fixed

in the imperial ordinance No. 251 of the thirty-second year of Meiji,* but has not been registered before the said time, it can not be set up against third persons unless it is registered within one year from time.

(2) For the immovables mentioned in article 1, special registry books shall be opened and kept at the respective registry offices within whose jurisdiction such immovables are situated.

(3) Each folio of a registry book mentioned in the preceding article is divided into a column for the number of registration, a division for the designation of the immovable, and four sections headed respectively ko, otsu, hei, tei.† The division for the designation contains a column for the description and a column for the number of description. Each of the four sections contains a column for the subject-matter of the registration and a column for the number of the order.

In the column for the number of registration as to each piece of land or building is entered the order in which it has first been registered in the registry book.

In the column for the land, buildings or outbuildings are described and alterations of the same are entered. In the column for the number of the description the order of priority of the matters entered in the column of description is entered.

In the column for the subject-matter of section ko are entered:

(*a*) In the land-registry book matter relating to superficies.

(*b*) In the building-registry book matters relating to ownership.

In the column for the subject-matter of section otsu are entered matters relating to preferential rights, pledges, and mortgages.

In the column for the subject-matter of section hei are entered matters relating to leases.‡

In the column for the subject-matter of section tei are entered matters relating to rights not mentioned in the three preceding paragraphs.

In the column for the number of the order is entered the number indicating the order of priority of each matter registered in the column for subject-matters.

(4) When an application for registration is made, all facts which can be set up against third persons must be mentioned in the application, and the documents necessary to prove such facts must be annexed.

(5) A copy of the registry book of a foreign consulate relating to an immovable mentioned in article 1 has the same effect as the registry book.

When an application for registration as to an immovable registered in a foreign consulate is made after this ordinance takes effect, the provisions of article 193§ of the law concerning the registration of immovables apply correspondingly.

The Minister of Justice may make necessary rules in regard to matters mentioned in the foregoing two paragraphs.

(6) As to matters not provided for in this ordinance, the provisions of the law concerning the registration of immovables apply correspondingly.

Additional provision.

This ordinance takes effect on July 17, 1899.

IMPERIAL ORDINANCE NO. 333 OF JULY 7, 1899.

(1) When a Japanese subject or Japanese juridical person acquires a superficies or lease intended to be perpetual, which has been created for an alien or for a foreign juridical person in land which belongs to the Government, such person acquires the ownership of the land.

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* That is the time fixed for the taking effect of the new treaties, either the 17th of July or the 5th of August, 1899.

† That is, A, B, C, D.

‡ Properly "hiring," chintaishaku.

§ This article relates to the forms on which registrations are to be made in the registry book.

(2) If in the case mentioned in the preceding article the land does not belong to the Government, the superficiary or lessee may acquire the ownership of the land on paying a proper sum to its owner.

If a superficiary or a lessee, on the demand of the owner, gives notice of his intention not to acquire the ownership as above provided, or if he does not within one year after such demand proceed as specified in the foregoing paragraph, the owner may apply to the court to have the duration of the superficies or the lease determined in accordance with the provisions of the civil code, on payment of a proper indemnity.

(3) The provisions of the preceding two articles shall not affect any rights which third persons may have in such land.

Additional provision.

This ordinance takes effect on July 17, 1899.

NOTIFICATION OF THE JUDICIAL DEPARTMENT.

The following procedure is established for dealing with the registration of immovables which are subject to the rights of foreigners or foreign juridical persons.

KIYOURA KEIGO,
Minister of Justice.

JULY *10, 1899.*

ARTICLE I. The provisions of the detailed regulations for carrying out the law of registration of immovables shall, except when there is a special provision to the contrary in this notification, apply, mutatis mutandis, in the case of registration governed by the provisions of article 1 of imperial ordinance No. 329 of 1899.

ART. II. The local courts shall prepare land registers relating to the rights of foreigners, or foreign juridical persons, and registers of buildings relating to the rights of foreigners or foreign juridical persons.

ART. III. Copies of the registers of foreign consulates shall be bound together and kept separately, according to each country, by the local courts, and the president of a local court shall note on the back of the covers the number of pages they contain, and write thereon his official title and name, and affix his seal of office, and shall transmit them to the registration office which has control in the matter.

ART. IV. The local courts shall make translation of the copies of the registers of foreign consulates, and the procedure laid down in the preceding article shall also be followed in the case of these translations.

ART. V. The local courts shall annex, in the copies of the registers of the foreign consulates, numbers to all the registrations in the various volumes, and shall also affix the same numbers to translations of copies of registers.

ART. VI. When the certificate to be attached to an application in accordance with the provisions of Article IV of imperial ordinance No. 329 of 1899 is written in a foreign language, the applicant shall attach to it a translation thereof.

ART. VII. Transferences of the registrations of foreign consulates to the registers in accordance with the provisions of the second clause of Article V of imperial ordinance No. 329 of 1899 shall be made according to the translations thereof.

ART. VIII. When the registrations of foreign consulates have been transferred to the registers, the fact that they have been transferred to page No. —, of volume No. —, of the registers, the numbers of the registrations, and the dates, shall be noted on the copies of the registers of foreign consulates and on the translations thereof, and they shall be sealed by the registrar.

ART. IX. In the case of registration made in accordance with imperial ordinance No. 329 of 1899, index books of registrations of land and of registrations of buildings shall be specially kept. Matters relating to the registrations of foreign consulates shall also be inserted in these index books.

ART. X. In cases where Japanese subjects or juridical persons acquire rights of superficies or rights of lease, which were established with the intention of their continuance in perpetuity for foreigners or foreign juridical persons, the registrar shall, when he registers them in land registers relating to the rights of foreigners or foreign juridical persons, close the entries of registration relating to those rights.

Under the circumstances mentioned in the preceding clause, when there are among those entries registrations relating to other rights, which have as their subject rights of superficies or rights of lease, cancellation of such registration shall be effected and noted, and the registration entries shall be closed after the registrations relating to other rights have ceased to appear among the registration entries.

ART. XI. In cases where Japanese subjects or juridical persons acquire rights of ownership of land in accordance with Article I or II of imperial ordinance No. 333 of 1899, when there are, among the entries of registration of the land registers relating to the rights of foreigners or foreign juridical persons, registrations relating to rights of superficies or rights of lease, and when those registrations remain uncanceled, registration of such rights of ownership only shall be made in the general register.

ART. XII. In cases where there are registrations relating to the same land in the general register and in the land register for the rights of foreigners or foreign juridical persons, or in the copies of the registers of foreign consulates, the registrar shall, in a convenient manner, put marks of reference in suitable places among the registration entries (including, in the case of copies of the registers of foreign consulates, the translations) of each register.

MEDICAL INSPECTION OF SHIPS.

ARTICLE I. When a vessel arrives at a port where medical inspection is in operation, she shall hoist the flag prescribed by the international code of signals, approach the guardships or the lookout, and be ordered to stop temporarily, after which the following information shall be obtained with regard to the master and each of those on board:

(1) The name of the port of exit.

(2) The name of any ports of call.

(3) Whether there is any person actually suffering from a contagious disease or whether any person has died of such a disease.

(4) Whether on the voyage or during stay in ports of call there has been any case of sickness or death from contagious disease.

(5) Whether any communication has been held with a vessel in which there has been a case of sickness or death from contagious disease.

Vessels which are clearly known to be navigating home waters shall not be required to stop, or furnish information, as prescribed in the above clauses.

ART. II. When, in consequence of the roughness of the sea, a ship can not be visited, the above information shall be obtained by the aid of the international code of signals, and, if medical inspection is necessary, the ship shall be required to anchor outside the harbor and wait until the sea has subsided, after which she shall be visited.

In the event of a ship disobeying the order to anchor outside the harbor, or continuing her voyage without regard to the signals, she shall be required to put back and to furnish the required information or undergo inspection. In such a case, the fact shall be communicated to the office of harbor affairs and to the police station.

A ship arriving after sunset, provided she is not a mail steamer or has no spe-

cial reason for dispatch, shall be required to anchor outside the harbor and to furnish the required information or undergo inspection the following morning.

ART. III. In the case of a ship as above coming from a foreign port or from Formosa, written forms as prescribed shall be handed to the master or to one of the officers, and they shall be required to fill in the required information. At the same time, the whole or a part of the passengers and crew shall be ordered to assemble upon the deck, and, after the written forms have been received, all these persons, as well as the cabins, shall be inspected. Should the inspection reveal nothing unusual, a permit shall be handed to the master or to his representative.

ART. IV. With regard to the ships mentioned above, the following procedure shall be observed:

(1) When there is actually on board a person suffering, or a person who has died, from a contagious disease, or when there has been a case of illness or death from contagious disease on the voyage or while in a port of call, the process of disinfection shall be carried out and the ship be detained, unless the disease is smallpox or scarlet fever.

(2) When a ship has sailed from an infected port, or has called at such a port, or has had communication with an infected ship, or when there are doubts as to these points, the process of disinfection shall be carried out, and she shall be required to stop, unless the disease is smallpox or scarlet fever.

(3) Vessels coming within the purview of Article VI of the open-port regulations need not undergo disinfection.

In the case mentioned in this clause, information shall be given to the harbor office, the custom-house, the post-office, and the police.

ART. V. Should a ship belonging to the category of clause 1, Article III, have on board a person suffering from, or the body of a person who has died of, a contagious disease other than those enumerated in Article II of the regulations for carrying out medical inspection in open ports, a report must be sent to the police office of the district.

ART. VI. A passenger or member of the crew who has come into contact with, or who is suspected of having come into contact with, a person suffering from, or the body of a person who has died of pest, cholera, or yellow fever, shall be required to move to the quarantine station.

ART. VII. In the case of a foreign or native man-of-war, the information detailed in Article I shall be obtained in writing from the commander or the medical officer, Under such circumstances, the usual written forms need not be employed, nor need a permit be given.

ART. VIII. When a ship of war, foreign or native, falls within the category of the first clause of Article IV, she shall be disinfected, after consultation with her commander.

ART. IX. When ships or articles are disinfected, the following provisions shall be observed:

(Here follow seven clauses setting forth the process of disinfection in detail.)

ART. X. When the passengers or crew of a ship are detained, inspections shall be made from time to time to determine the state of their health, and medical examinations may be carried out should such a course appear necessary.

LAW CONCERNING MIXED RESIDENCE.

ARTICLE 1. Foreigners who have no freedom of residence either by virtue of treaty or of custom may hereafter reside, remove, carry on trade, and perform other actions outside the former settlements and mixed residential districts; provided that in the case of laborers, they can not reside or carry on their business outside

the former settlements or mixed residential districts without special permission from the administrative authorities.

The character of laborers (referred to in the preceding clause) and details for the operation of this law shall be decided by the Minister for Home Affairs.

ART. 2. Persons infringing the proviso of clause 1 of the foregoing article shall be sentenced to a fine not exceeding 100 yen ($49.80).

Supplementary rules.

ART. 3. This law shall be put in operation on and after August 8, 1899.

ART. 4. Imperial ordinance No. 137, of 1894, shall be rescinded after the date on which this law comes into force.

NOTIFICATION BY THE MINISTER FOR HOME AFFAIRS.

The laborers mentioned in article 1 of above law shall be men engaged in agricultural, fishing, mining, engineering, architectural, manufacturing, transporting, carting, stevedoring, and other miscellaneous work; provided that this rule is not applicable to those who are employed in household services, such as cooking and waiting.

Permission given to laborers (to reside in the interior) may be canceled by a local governor when he deems it necessary to do so for the public welfare.

REGULATIONS RELATING TO RELIGION.

ARTICLE I. Persons wishing to engage in the propagation of a religion must send in a report to the governor, in whose jurisdiction their residence is, stating (1) the name of the religion, (2) the method of propagating such religion, together with their domicile, accompanied by a document stating their antecedents.

Persons who have been engaged in the work of propagating a religion prior to the date on which these regulations come into operation, shall forward the above-mentioned report within two months after the operation of these regulations.

ART. II. Persons wishing to establish a temple, church, preaching place, etc., must obtain the permission of the governor in whose jurisdiction such temple, church, etc., is situated, forwarding an application stating the following particulars:

(1) Reason for establishing the temple, church, etc.

(2) The term within which such temple, church, etc., is to be established.

(3) Names of the building, location, and other matters of importance relating to the building and the ground occupied. The above particulars are to be set forth in a plan.

(4) Name of the religion.

(5) The manner of the management and maintenance of such temple, church, etc.

(6) The qualifications of the person or persons in charge of such institution and the method of selecting them if such persons are appointed.

Permission given by a governor for the establishment of a church, temple, etc., shall become null and void when such institution is not established within the period mentioned in subdivision 2 of the preceding clause.

Persons who shall have established or are in charge of a temple, church, etc., for the purpose of propagating a religion before these regulations come into effect shall report the particulars mentioned in clause 1 of this article to the governor of the place where such institution is situated, within two months from the operation of these regulations.

Persons who have forwarded a report in accordance with the provision of the preceding clause shall be regarded as persons who are in receipt of permission from the governor.

ART. III. Persons who have established or who look after such institutions shall forward a document stating their antecedents, or those of the person in charge of the institution, to the governor of the place where such institution is situated. Such a document must be also forwarded to the governor in the event of any change of persons in charge of the institution.

ART. IV. When any change has taken place in the matter mentioned in the respective clauses of Article I, it must be reported to the governor of the place within two weeks by the persons engaged in the propagation of the religion.

Persons who establish or who are in charge of such institutions shall obtain the permission of the governor beforehand and give their reasons, should they wish to make any change in the particulars mentioned in the clauses of Article II. In the event of the removal of such institution to another prefecture, it is, however, necessary to obtain permission from the governor of the new place.

Reports of the closing of temples, churches, etc., shall be forwarded to the governor within two weeks from the day when such institution is actually closed. In the event of removal, a report shall be forwarded to the governor of the former place.

ART. V. The old regulations shall be applied in their entirety with regard to the establishment, removal, and closing of Shinto or Buddhist institutions, and shall also govern the qualifications, etc., of the Shinto and Buddhist propagandists.

ART. VI. These regulations shall be put into operation on and after August 4, 1899.

PRISON REGULATIONS.

The following is a summary of the amendments in the prison regulations.

The personal effects of a person newly incarcerated shall be kept in trust at the prison after they have been inspected. This provision does not apply to the property to be dealt with in accordance with the prison operation rules.

The work to be performed by convicts in penal servitude shall be determined according to the category and nature of crime, his or her age, proclivity, future prospects, etc., and also according to his or her physical conditions.

After one hundred days of penal servitude have been undergone, a prisoner, when convicted of felony, shall receive 10 to 50 per cent, and when convicted of malfeasance 20 to 60 per cent of his earnings. A convict not in penal servitude, or a criminal defendant who undertakes work, shall receive 70 per cent of his earnings.

A convict or a criminal defendant shall be allowed the following rations: A ration consisting of 40 per cent of inferior rice and 60 per cent of barley, with accompanying dishes, not more than 3 sen (1.49 cents) in value per day. An inmate of a reformatory and a criminal defendant may be allowed to feed at his own expense.

In case convicts or inmates of reformatories wish to read books, permission shall be granted only as regards those publications judged not to interfere with the work of correction or maintenance of order.

Convicts may send out only one letter in a month, exclusive of extraordinary cases permitted by chief jailers.

POINTS IN REVENUE LAWS REQUIRING THE ATTENTION OF FOREIGN RESIDENTS.

All revenue laws shall be applied to foreign residents on and after the 4th of August, 1899.

The income tax of a juridical person is imposed according to the statements of the current business year, and that of Class II is imposed whenever the interest on loans and debentures is paid.

The income tax of Class III shall virtually take effect next year, as the amount of this class of income for each individual shall be determined by the investigation committee receiving the statements of individual taxpayers, which shall be sent into the revenue office in April next year.

For these statements there is no special form, the Department of Finance having lately abolished all such forms, so as to give facility to the taxpayer. If, however, anyone wants a blank form for the statement, he may have it on applying to the revenue office. In such case, the taxpayer may fill in the items, together with the necessary facts. The statement of income for a juridical person shall be made according to the income-tax law and the regulations for the execution of the said law.

The execution of the business-tax law shall commence in January next year, the basis for the assessment of the tax being the statements of the payer submitted to the revenue office in the month of January, as provided in Article XIII of the law. There is no special form for the statement, it being sufficient to state all requirements provided in the article.

Municipal authorities of cities and towns (for instance, the municipal authority of the city of Yokohama or the town of Ota) are authorized by law to collect the income tax, as well as the business tax. Municipal authorities issue a notice to the taxpayer in the month when the taxes shall be assessed (the fixed period for the income tax being September and March; and for the business tax, May and November).

Taxpayers shall pay tax in cash and at the same time send in the notice already received to the municipal authorities, from whom they shall obtain a receipt. If the taxpayer fails to pay taxes at the end of the fixed period above mentioned, the director of the revenue office shall appoint a final date of payment for such taxpayer. In such case, the revenue office shall assess the fee for the procedure. If after the lapse of this appointed date the payer still fails to pay the taxes, his property shall be attached.

For a bill of exchange or promissory note the rate is 2 sen (0.98 cent) for each one not less than 5 yen ($2.49) and not exceeding 2,000 yen ($996), and 10 sen (4.9 cents) for each one exceeding 2,000 yen. There is no prescribed mode for affixing the stamp; it is only necessary to deface the stamp by the signature of the person concerned.

REGISTRATION DUTY.

The duty shall be paid by affixing stamps, which shall be defaced by an official of such offices as the matter concerns. In the above and all other cases where the stamp is required, the revenue and other stamps in use, except postage stamps, may be used.

There are 25 offices of revenue administration (zeirnu kwanri kyoku) throughout the Empire, each office being presided over by a director. Besides the 25 main offices of revenue administration, there are 520 branch offices.

The directors of main offices and those of principal branch offices are appointed by the Minister President of State, under the approval of His Majesty the Emperor. All other officers are appointed by the Minister of Finance.

The collector, when inspecting or making search regarding revenue matters in accordance with the law, is provided with a certificate of proper authority, and shall produce it when he intends to make the inspection.

Any complaint about the assessment of revenue shall be brought to the notice of the Minister of Finance, through the director of the revenue administration office of the district where the complainant resides.

TOBACCO MONOPOLY IN JAPAN.

Under date of July 24, 1899, Consul-General Gowey, of Yokohama, sends a clipping from the Japan Gazette of July 20, giving the regulations relative to the tobacco monopoly in Japan, as follows:

GENERAL RULES.

(1) The Government has the right to monopoly of leaf tobacco.

(2) Nobody can import any leaf tobacco from abroad, except the Government.

EXPORTATION.

(3) Leaf tobacco intended for exportation may, on permission of the Government, be sold to other party without being given up to Government.

(4) The Government will take into custody all leaf tobacco for exportation.

(5) The leaf tobacco in custody of the Government may be bought or sold with certificates of custody.

(6) The leaf tobacco in custody, if not exported within a year, may be collected by the Government against a renumeration at the proper rate.

(7) The leaf tobacco in custody will be delivered to the exporter at the time of exportation.

(8) The expenses of storage and transportation must be borne by the holders of certificates of custody.

(9) If any additional preparation, such as selection of leaves and repacking, is necessary, the owner should present a statement showing the reason, place, and time of such preparation, together with the certificates of custody, and obtain approval of the local monopoly office.

(10) Having finished the aforesaid preparation, the owner should bring back the leaf tobacco, together with all waste leaves, stems, etc., to the local monopoly offices for custody and disposal.

(11) The expenses of storage and transportation should be paid and the certificates of custody be returned before demanding delivery of leaf tobacco for exportation.

(12) Any certificate of custody, if injured or stained, may be exchanged for a new one on application to the local monopoly office.

(13) If the certificates have been lost, the leaf tobacco may be delivered on deposit of money or national bonds equal in amount to the value of the leaf tobacco, otherwise two or more persons shall be required to stand as security against any loss. These persons must have sufficient property and be approved as competent by the monopoly office.

MANUFACTURE AND TRADING.

(14) Any person desiring to engage in business of manufacture of tobacco or dealing in leaf tobacco shall apply to the local monopoly office and obtain a license on payment of annual fee as under:

		Yen.
For a manufacturer	per factory	50=$24.90
For a dealer		50= 24.90

Any person desiring to disengage from business shall have to report the fact when so disengaged.

(15) Leaf tobacco is sold by the Government according to fixed prices, but when necessary it may be sold by auction.

(16) Nobody except a manufacturer or dealer can buy or receive any leaf tobacco. An exception is made to leaf tobacco bought as samples under permission of the officers authorized.

(17) No manufacturer can make use of any material other than tobacco in manufacturing, nor can a dealer buy or sell any material other than tobacco with the object to supply it for manufacture of tobacco.

(18) Any manufacturer or dealer who has any leaf tobacco placed in warehouses outside of his establishment shall send a report, countersigned by the proprietor of such warehouses, to the local monopoly office, indicating the location of warehouses and quantity of each of different kinds of leaf tobacco; this report to be repeated whenever the places of storage are changed.

(19) Manufacturers and dealers must keep books and enter therein particulars of all business transactions to be submitted to the examination of proper officers, who will visit them from time to time.

(20) Any leaf tobacco not sold by the Government, if found in possession of any manufacturer or dealer, will be collected by the Government, whomsoever it may belong to, and remuneration will be paid at the proper rate.

(21) The Government can inspect warehouses or any place of storage of tobacco belonging to anyone whatever, so the officers authorized can enter any place where tobacco is kept or supposed to be kept and take necessary measures for proper supervision. If in course of transmission, it can be examined on the spot wherever it may be.

PENALTY.

(22) Any manufacturers or dealers who have knowingly bought or received any smuggled goods or leaf tobacco from any unlicensed or unknown persons will be fined a sum between 10 and 300 yen ($4.98 and $149.40), with confiscation of the contraband tobacco if it exists, but, if transferred or consumed, the amount of the value will be levied.

(23) Any person who has, not being licensed, engaged in manufacture or trade will be fined a sum not less than double nor exceeding five times the amount of license fee, with confiscation of contraband tobacco if it exists, but, if not, the amount of the value will be levied.

(24) Manufacturers who have made use of any material other than tobacco in manufacturing and dealers who have bought or sold any material other than tobacco, intending to supply it for manufacture of tobacco, will be fined a sum between 10 and 100 yen ($4.98 and $49.80), with confiscation of the contraband manufacture or material if it exists, but, if not, the amount of the value will be levied.

(25) Those who have kept others' leaf tobacco without reporting to the Government will be fined between 3 and 30 yen ($1.49 and $14.94). The leaf so kept will be collected by the Government against remuneration at the proper rate.

(26) Manufacturers or dealers who have neglected to make proper entries in their books or have made false entries will be fined a sum between 3 and 30 yen ($1.49 and $14.94).

(27) Those who have made a false declaration or neglected to make declaration to the Government or against interrogation of the officers authorized will be fined a sum between 3 and 30 yen ($1.49 and $14.94).

(28) At the time of inspection of tobacco and books, those who have refused or avoided or obstructed the execution of duty by the officers authorized will be fined a sum between 2 and 20 yen (99 cents and $9.96).

(29) When the family, lodgers, representatives, or employees of a manufacturer or dealer, in course of their avocation, have offended against the foregoing provisions, the manufacturer or dealer can not escape from the penalties provided for, though he did not order the offense.

MINING BUBBLE IN DUTCH INDIA.

Since the earliest times, it has been known that gold existed in the islands of this colony in more or less infinitesimal quantities. Reports were started about boat loads of natives having come into the various settlements around the coast with their canoes loaded down with nuggets of gold. The Batavia and Sœrabaya newspapers were filled with letters and articles written by so-called travelers and prospectors, giving accounts of the fabulous mineral wealth of the islands, and declaring that they would prove a second Klondike.

The next thing done was to start "exploration companies," with capitals varying from $100,000 to $1,500,000, according to the money-drawing qualities of the directors and the possibilities of finding the gold. Where the prospects were the most hopeless, they generally started with the biggest capital. The money being raised and the concessions obtained from the Government, it was considered necessary to do something for form's sake to satisfy the stockholders, and expert mining engineers from the United States and Australia were engaged at large salaries, to make a pretense of prospecting. Expensive mining machinery was imported, the commission being usually given to some impecunious friend of one of the directors, and the public was informed that work was proceeding. From time to time (as a rule, I noticed, when the mining-share market happened to be sagging a bit), enthusiastic letters from the engineers would arrive giving glowing accounts of the prospects, and then the directors would go around whispering confidentially that they had just a few more shares left, which they would be willing to let go at a point or two under the market as a favor.

No means were neglected to induce the public to buy; even poor half-caste clerks, struggling along on pittances of $40 a month or less, and government school teachers were persuaded to invest their savings.

What is the net tangible result of all this? A number of men who two years ago were on the verge of bankruptcy have made fortunes, the public is loaded with stock which at present happens to be selling pretty fairly on account of an artificial boom, lots of money has been earned by brokers, but no gold is in evidence.

For the last year, I have been in direct correspondence with mining engineers in some of these concessions, and speaking confidentially to me they do not hesitate to tell the truth. With possibly one or two exceptions it can be stated that none of the present mining concerns in the Celebes amounts to anything, so far as the

prospect of getting gold in paying quantities within the next ten years is concerned. One man, of great experience in every part of the world, goes so far as to say that they never will get gold in any amount. Meanwhile, the infection has spread to Singapore, and even to Holland, whence numerous orders have been received of late. There are indications that the insiders here are now beginning to think of unloading altogether shares that did not cost them a cent in the beginning.

In all this combination of greed and plunder, I do not wish to be understood as saying that there are no honestly conducted undertakings. Even if gold never results in paying amounts, there are two or three of these companies that have been managed with a perfectly honest and genuine desire to find it. The Dutch, while good agriculturalists and traders, are not good financiers, and in the long run it is to be feared that the honestly managed concerns will, when the bubble bursts—as it inevitably must some day—fare as badly as the out-and-out swindles.

I am led to report on this matter because the operations have begun to affect American citizens and interests. Several have been induced to come here under contract, and in nearly every case they heartily wish they were back. One unfortunate man has 500 square miles of the densest tropical jungle to explore. I leave it to expert mining men what sort of careful prospecting can be done under those conditions. He is further hampered by ridiculous directions from the managers in Sœrabaya.

Another American employed by one of these exploration companies was given a worse than worthless assistant, and on his complaining that he was unable to get along with this man, the directors promptly broke the contract and declined to pay him his salary any longer. He is now suing for breach of contract and salary due, but the laws here are very onerous for foreigners who engage in litigation, and it is unlikely that he will get his rights.

An important Chicago firm has been sending mining men here. If it knew how its good name is being used to boost up queer enterprises, I think it would hesitate before sending any more. There was talk some time ago of trying to interest American investors in these schemes; I sincerely hope the effort will not succeed. One of their customs is to hamper the engineers with bad or unsuitable machinery, and then lay the blame on them for failure. In one case I know of, a petroleum motor was supplied, and 500 tons of coal were sent up to run it with. Needless to say, the coal merchant was a friend of one of the directors. In another instance, a lot of new, but quite inappropriate, machinery was purchased and dumped on an island below tide level, so that the water is washing it twice

a day. The failure of results is always laid on the unfortunate engineer, or else on the machinery itself, whether it has been used or not.

To illustrate the spirit of criticism of Americans which prevails here, I cite an article in a recent issue of the Sœrabaya Courant. It refers to the petroleum situation, rather than gold mining, but the method of attack is the same in both cases. The article contains the assertion that the Americans are bribed not to find oil on the Dutch concessions. Practically all the success the Dutch have had in this field is due to Americans.

As I said above, prices of shares are pretty high at present, and the public has thrown all caution to the winds, but the crash is inevitable. I would advise Americans not to touch a share, no matter how glowing the last report; and, above all, not to be induced to come here under contract, for if a Dutch company chooses to break a contract with a foreigner, there is practically no redress.

SIDNEY B. EVERETT,

BATAVIA, *July 19, 1899.* *Consul.*

RAILWAY BRIDGES IN INDIA.

In the interest of our bridge manufacturers, I would call attention to the following correspondence in reference to bridges about to be contracted for on the Southern Mahratta Railway, British India.

On July 8 last, I wrote to the honorable secretary to the government of India, public works department:

I am informed that several large iron or steel bridges will be contracted for on the Southern Mahratta Railway, and I have the honor to ask if proposals for the work will be entertained from the iron and steel manufacturers of the United States. If so, will you kindly furnish me the necessary specifications, so that they may have an opportunity to bid for the contract.

In this connection, I will call your attention to the fact that contract for the Atbara bridge across the River Nile was secured by one of our manufacturers in fair and open competition with English and other contractors; and by permitting the manufacturers of the United States—who have the most improved facilities for doing such work on a large scale—to enter into competition for the work, money may be saved to the government.

The following answer has been received:

With reference to your letter dated Calcutta, the 8th of July, 1899, I am directed to inform you that stores for the Southern Mahratta Railway Company, as for other railway companies, are got out through their home boards on the advice of their consulting engineers, as per list attached; and that contracts for girders and iron work for state railways worked by the state are arranged for by the director-general of stores, at the India Office, who calls for tenders and furnishes the necessary specifications.

The following are the consulting engineers of the various railways of India, with whom our bridge manufacturers should correspond if they desire to bid for contracts that may be in contemplation, viz: Sir A. M. Rendel & Son, 8 Great George street, Westminister, S. W. London, for Indian state railways, East Indian Railway, Bengal and Northwestern Railway, Southern Mahratta Railway, and Bengal Central Railway; Sir George A. Bruce, 3 Victoria street, London, S. W., for Great Indian Peninsula Railway, Indian Midland Railway, and South Indian Railway.

It would also be well for them to correspond with the director-general of stores, India Office, London, with reference to contracts on the railways worked by the state.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *August 9, 1899.*

TRADE OF CALCUTTA.

The trade of Calcutta has reached proportions that should attract the attention of our manufacturers, and it will not be uninteresting to trace its development.

The first English ship intended for Hugli, then the principal port, about 20 miles above Calcutta, was dispatched in 1650; but the agents at Madras would not permit her to attempt the navigation of the river to that place, and she only went as far as Balasore, with a cargo of money and goods valued at about $37,000.

In 1795–96 (a little more than a century from the foundation of the city), 179 ships of the total burden of 57,696 tons came to the port from places outside the territories of the three presidencies, and 184 ships, with an aggregate tonnage of 67,785, went to such places. In the same year, the total value of the inward trade, including that from the coast, Manila, China, Penang, and New South Wales, was estimated at about $8,000,000 and the outward at about $18,000,000. Owing to political complications in Europe, there was a falling off during the next two years. But the opening of trade in 1813 caused a great increase in the tonnage, so that in 1817–18, 428 ships with an aggregate tonnage of 161,340 arrived from beyond Indian limits; but the increase was not maintained. Twenty-five years later, however, the average number of ships entered inward was 646, with a tonnage of 262,251, and the average value of imports and exports together, including opium and treasure, for the years 1841–1843 amounted to about $70,000,000, or nearly three times the total of 1795. In the year 1897–98, 1,102 sea-going steamers, with a gross tonnage of 3,311,415 and net of 2,116,940 tons, entered the port, and 1,097 such steamers of 3,275,685 gross and 2,097,895 net

tonnage left it; besides these, 133 sailing ships of 250,958 gross and 237,477 net tonnage visited Calcutta, and 126 of 232,586 gross and 219,808 net tonnage went out. The gross tonnage entering the port was thus 3,562,373, or more than thirteen times as great as in 1841–1843.

The average had increased from 330 tons in 1795, 405 tons in 1841–1843, to upwards of 3,000 tons for steamers and nearly 1,900 tons for sailing vessels. The average gross tonnage of steamers from European ports via the Suez Canal in 1897–98 was no less than 4,033 tons. Thirty years ago, more than three sailing vessels to one steamer entered the port; in 1897–98, there were more than eight steamers for one sailing ship. The influence of steam is as evident in the case of sailing ships as in that of steamers, since powerful tugs are now available and make it possible for much larger ships to use the river with safety than formerly. Since 1870, the average tonnage of sailing ships has nearly doubled, while that of steamers has increased by more than 237 per cent, the largest steamer that uses this port being of 6,500 tons.

The total value of the imports for the year just past from foreign countries alone, without counting the coasting trade, was no less than about $100,000,000 and that of exports about $140,000,000. In the past year, cotton fabrics were by far the most important class of goods imported, a singular reversal of the old course of Indian commerce, cotton goods accounting for half the total. Sugar, too, instead of being a large item of export, as it once was, was imported to the value of nearly $3,500,000. The importations of salt, which in the old days was made in Bengal, but a considerable proportion of which now comes from the Red Sea ports, were worth nearly $1,650,000. Machinery and railway plant together were of the estimated value of nearly $6,500,000.

On the export side, too, are seen great changes from the course of the old commerce. Jute, raw and manufactured, is now by far the largest item, contributing over a quarter of the total. Even this is much below the ordinary proportion, as there was a poor crop last year. Next comes tea, which was valued at nearly $24,000,000; hides and skins accounted for nearly $12,000,000 and seeds (chiefly linseed) for $13,000,000. The recovery of the trade in rice after the famine and high prices of wheat in Europe caused the item of grain and pulse to rise to the aggregate value of over $16,000,000. Of the old staples, opium ($13,000,000), indigo ($6,000,000), lac ($2,800,000), silk ($2,000,000), saltpeter ($1,250,000), raw cotton ($2,300,000), and twist and yarn ($2,000,000) are the chief exports.

But a new industry that has suddenly sprung up and has grown with astonishing rapidity is coal mining. In 1896–97, the exports of

coal were only 678,580 tons, foreign ports taking about a quarter sent to the coast ports. Now, the limitation of the coal trade of Calcutta is determined by the capacity of the railways to carry the immensely increased output, and measures have been taken to provide greater facilities.

The above will give some idea of the magnitude of the trade of Calcutta and will emphasize what I have said in previous reports—that our manufacturers, especially of cotton fabrics, machinery, and railway materials, should take advantage of this large and growing market for their products.

I will add that Calcutta is not only a great commercial city, but is becoming a manufacturing center as well, and is the distributing point of merchandise to the larger part of India. It has nearly a million inhabitants and is the capital of British India. It will be readily seen that it is a market worth exploiting by our manufacturers, and the object of this report is to direct their attention to its rapidly increasing importance.

For the statistics contained in this report, I am greatly indebted to the able letters on Calcutta by Sir Charles Stevens, recently published in the London Daily Mail.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *July 12, 1899.*

AMERICAN AGRICULTURAL IMPLEMENTS IN NEW SOUTH WALES.

The successful introduction of American-made agricultural implements into New South Wales is comparatively recent, as the total importations of such articles into this country in 1897 was but £96,574 ($469,350), while during the year 1898 there was a total of £124,863 ($606,835) worth imported. Until a few years ago, there was a real prejudice against the "flimsy," light, and unsubstantial "Yankee" implement. But a few enterprising agents "stayed" with the trade, and gradually it dawned upon the people that Americans were applying scientific principles in the construction of their implements, and that they made no sacrifice of strength or durability by reducing the weight to the minimum.

Plows.—Fifteen years ago, I am informed, the greater portion of the furrow plows used in New South Wales were of colonial make, the imported ones coming almost exclusively from England. The American plow was considered too light for the heavy, compact soil, so common in the colony. The frame of the old-style plow was

made wholly of iron or steel and was about as long as the moral law. The moldboard was some 3 or 4 feet in length, with a turn that hardly turned the furrow. The introduction of the plow common to our farms, with the short beam and short and abrupt moldboard, was rather difficult and slow; but it finally won a place by coming into use with those whose farms were of light, friable soil.

While the single-furrow sulky plow is not often seen, more gang plows turning two, three, and often four furrows are used in proportion than in any part of our country with which I am acquainted. As the soil is usually stiff and compact, a plow turning a 14-inch furrow is rather uncommon. The usual plow cuts but 10 or 12 inches. The shares on plows for Australia must be of the best material.

I am inclined to think that now fully half the foreign-made plows in use in the colony are of American make.

Cultivators.—I have seen none of what we call corn cultivators, either riding or walking, though there are many spring-toothed cultivators that answer well for cultivator and harrow work. These serve to pulverize the ground; and as most small grain is sown with drills, the spring-toothed implement is generally in use.

Drills.—Grain and fertilizer drills are recent importations. For a new country, there is a considerable use of fertilizers in this colony, and wherever these are used for wheat fields the drill has found a place, as it is the most economic implement for the double purpose of saving the grain and distributing the fertilizer. Most of these now come from the United States. The wheel pulverizers, or rolling cutters, may also come under this head, and of the many in use the United States furnishes a goodly portion.

Harvesters.—The United States has a fair share of the harvester trade, not only in New South Wales, but in all the Australian colonies. American reapers and binders are not only very attractive in appearance, but they are light to handle, of light draft, strong, durable, and rarely out of order. I am almost convinced that nine-tenths of the reapers and binders sold in Australia are of American make. Our manufacturers have satisfied the requirements of this market, and they are now reaping their reward.

Mowers.—We have a good trade in mowers in New South Wales, but in this machine we are not far ahead of the English make, and not much ahead, if any, in our sales in this market.

Steam engines.—American engines—stationary, portable, and traction—have failed to win the favor I think they deserve. While those used generally give good satisfaction, they are looked upon as too light and not durable. We should have better success in this line.

Chaff cutters.—Here, as a rule, people do not feed hay as we do,

but nearly all coarse provender is cut with a machine made for the purpose and is fed in a form called "chaff." In the market or among horse drivers or owners one seldom hears the word "hay;" "chaff" is the common expression. Some of the chaff cutters are large machines that are taken from farm to farm, as our thrashers are, where the hay, either loose or bound in sheaves, is cut by the ton. These chaff cutters are almost all of English or colonial make. We have no share of this trade. The power, called by us horsepower, used in running these chaff cutters, as well as those used for shellers, wood sawers, shearers, and the like, are most all of English make. The American horsepower has not quite satisfied the people in the matter of strength.

Harrows.—In these implements, we lead in New South Wales markets. The people here use excellent machinery, and none but the best will suit them; so the steel-frame joint harrow and the disk harrow or pulverizer are required. The frame must be light, strong, and easily handled.

Thrashing machines.—The American thrasher is not in favor in Australia. I do not know why, as I believe it to be superior to all others; but for some reason the people do not like it. In Australia, the straw of wheat is lighter for the yield of grain, and cleaner from all weeds and trash, than in any country I ever saw, possibly excepting Normandy, in France. It seems to me that our thrashers are especially adapted to the conditions here, but the farmers do not buy them.

Corn planters.—The area planted in corn in New South Wales is not great, and there are few farmers who raise much of this cereal. Last year, there were but 209,586 acres in the colony. The corn planter is used, but generally it is a "hand planter" or a single-row machine. The double row, two or four horse check-row planter, is hardly known by the farmers, and as it is not yet needed, it will be some time before it will be common in the market.

Cornshellers.—With the small acreage of corn grown, the cornsheller is, of course, not in very extensive use. Our country furnishes most of the shellers for this market. A great majority is of the small, single-hole type. There are also several with two holes, and a few—very few—large ones, run by steam power.

Wagons and buggies.—What we call a "wagon," especially the four-wheeled vehicle which we call a "farm wagon," is unknown in Australia. There are buses, stages, and some carriages, and a very few transit wagons, but nothing like the American wagon is seen. Here, the cart is omnipresent. Articles from 20 to 40 feet long—telegraph and telephone poles, long pieces of structural steel, and the like—are balanced on a cart hauled by one, two, or three horses—

tandem. We have a fairly good carriage and buggy trade, but it should be increased, and could be were freights reduced.

Wine, cider, and other presses.—These are being made in the colonies to some extent, but the American presses seem to be the most popular, and will probably hold the market. As all the hay here is pressed, we should have a good trade in hay-pressing machines, and, in fact, our trade in this line is growing.

Feed mills.—As a considerable amount of the maize fed to any kind of stock is ground or crushed, there is a good demand for these machines; but as a rule, the American machine is considered rather light, and liable to break or get out of order. The United Kingdom furnishes most of these implements.

Winnowers, or grain cleaners.—The United States articles, so far, have failed to satisfy the requirements of the trade.

Hayrakes.—In hayrakes, we about divide the market with England. I have not seen our best rakes in this market. The rakes for New South Wales should be very strong and the teeth must be numerous and of excellent quality. I think there is little use for hay tedders in this colony, as the weather is usually very dry at the season of hay harvest. Much of the hay is also made of wheat, cut and bound in sheaves by a harvester.

Pumps.—There are many American pumps, both windmill and hand, used in this country. However, as most of the people in this and the adjoining colonies are supplied with water from tanks set some feet above ground and fed by occasional rains on the roof of the buildings, there can be but a limited trade in this line.

Miscellaneous.—In lawn mowers, seed planters, and garden machinery, we have a fairly good trade; while in pitchforks, hoes, rakes, shovels, and the like, we have little reason to complain.

GEO. W. BELL,
Consul.

SYDNEY, *July 15, 1899.*

AMERICAN STEAM PLOWS IN HAWAII.

Several days ago, there was landed at this port, for the American Sugar Company, a set of steam plows made by an American firm. These plows, I am told, are the first of the kind made by an American firm, those heretofore made in the United States not being of the cable description, but worked by the engine hauling the plows over the land. These new plows were made by the O. S. Kelley Company, of Springfield, Ohio. They were ordered through their local representative, Mr. William C. Gregg, who, I am told, intends to remain here and see that no more orders go to Scotland.

Heretofore, all the steam plows used in Hawaii came from Scotland, because they were cheaper and also because American manufacturers did not make the kind employed here.

The O. S. Kelley Company agreed to furnish the plows as cheaply as the Scotch firm would, and guaranteed that they would be the equal in every particular of those now in use. The company wisely sent its own men over to set them up.

The plows cost $20,000 per set, and were delivered in forty days' less time than if ordered from Scotland.

It is estimated that during the next three years some twenty or thirty sets of plows will be required for the new plantations. They will all be bought in the United States, if the ones just received prove equal to those made in Scotland.

The American Sugar Company owns one of the new plantations and has justified its name by being the first sugar estate on these islands to use steam plows of American make.

WM. HAYWOOD,
Consul-General.

HONOLULU, *August 17, 1899.*

AMERICAN TRADE OPPORTUNITIES IN SOUTH AFRICA.

I submit the inquiry, Why does not the United States, with her resources, furnish this colony with certain commodities and preparations the ingredients and bases of which are produced more largely in the United States than elsewhere? As an example, take certain exports from the United Kingdom to this colony alone in 1898. In preserved meats the United Kingdom sent 846,034 pounds in a total importation of 3,676,848 pounds. Of course, of this one article, the United States furnishes the bulk, namely, 2,116,088 pounds; but is it not a fact that preserved meats, like preserved fish (salmon, for instance), are shipped from the United States in cans unlabeled, and English labels put on?

Of preserved fish, the United Kingdom furnished this colony 4,052,432 pounds, the total importation being 4,705,668 pounds. Of salted meats, the United Kingdom sent 2,414,370 pounds, against a total of 2,621,449 pounds. From this, one can see what is done with the large number of hams and sides sent from the United States uncured to Great Britain and there cured.

Of soap, the imports from the United Kingdom were 12,989,781 pounds, against a total importation of 13,292,343 pounds, and yet nearly all the soap stock—fats and the cotton-seed oil—are of American origin.

Typewriters to the value of £6,348 ($30,893) were sent from the United Kingdom, the total imports being £12,642 ($61,522), and yet I am informed that only one typewriter (an American invention) is manufactured in that Kingdom. Why not sell the United States typewriters to Cape Colony direct?

Out of a total importation of plated silverware of £40,944 ($199,254), the United Kingdom sent £35,538 ($172,946), and yet the United States is called the great silver-producing and plate-ware manufacturing country.

The United Kingdom in 1898 sent 73,252 pounds of tobacco out of a total import into the colony of 136,536 pounds, 6,910,718 cigars out of a total import of 12,384,244, and 20,413,259 cigarettes out of a total import of 77,174,599—all made from North Carolina and Virginia leaf.

With the vast crops of apples raised in the United States, why should the United Kingdom send 64,535 gallons of vinegar out of a total importation of 65,533 gallons, while the United States sent none?

The United States is the greatest furniture manufacturer among the nations, yet furniture to the value of £267,044 ($1,299,570), out of a total importation of £367,875 ($1,789,964), was received here from the United Kingdom in 1898.

Is not the glue produced by the great packers of America worth exporting, and can it not be produced as cheaply as elsewhere? Yet the United Kingdom sent hither 126,474 pounds out of a total of 136,166 pounds.

Lead and zinc were received from the United Kingdom in 1898 as follows: Lead, 23,815 cwts., and zinc valued at £1,414 ($6,881), against a total of 27,715 cwts. of lead and £2,981 ($14,507) worth of zinc.

Candles to the amount of 3,116,677 pounds were received from the United Kingdom out of a total import of 3,488,880 pounds; yet the greater portion of the tallow, spermaceti, stearin and stearin wax, stearic acid, and paraffin wax entering into their manufacture must have been of American origin.

Bicycles to the value of £135,760 ($660,675) were received from England, out of a total import of £174,650 ($849,934).

Golden sirup to the amount of 2,656,471 pounds out of a total import of 2,730,351 pounds was received from England, while the United States furnished only 5,141 pounds. The United Kingdom, to make the sirup, must import the sugar, etc.

Of cotton goods, the United Kingdom furnished £1,055,999 ($5,139,019) out of a total of £1,136,177 ($5,529,205); and yet the cotton came mainly from the United States.

Out of 6,073,060 pounds of potatoes, the United Kingdom sent 3,647,523 pounds. I am told that a large quantity of these were importations for seed, which has to be renewed in this colony every two years.

Admitting that much that is made and produced in the United States is sold through other countries to this colony and country, the question arises, Is the United States getting credit for exports to South Africa? In like manner it may well be asked, Does the United States get credit for the products which she imports from South Africa? The reasons for these conditions are many, but the one reason, perhaps, above all others is that Great Britain has the ships, the banking facilities, and the great merchants located in foreign countries.

J. G. STOWE,
Consul-General.

CAPE TOWN, *August 3, 1899.*

DIAMOND PRODUCTION OF THE TRANSVAAL.

According to a report just published, the output of diamonds in the Pretoria district during 1898 amounted to 11,025 carats, valued at £8,867 ($43,151.25). In December, 1897, the output was 166 carats, valued at £146 ($710.51), and for the same month in 1898 the output was 3,100 carats, with a value of £2,389 ($11,626.07). The largest stone found in 1898 was 38½ carats. Although the diamond industry is not developing with abnormal rapidity, there is every cause for satisfaction, the first stone having been discovered at Reitfontein only in August, 1897. The average value of stones found in this district is 16s. ($3.89) per carat, the average value of Kimberley diamonds 26s. ($6.33) per carat, and those found at Jagersfontein, in the Orange Free State, 34s. ($8.27) per carat. The diamonds in the Pretoria district are found in pipes, as on Schuller's mine and on Montrose. A similar formation has been found on Roodeplaats, on the Pienaars River, and another is also reported at Kameelfontein and Buffelsduff.

On the De Kroon farm, about 26 miles west of Pretoria, diamonds have been found; but, according to the State geologist, not in a blue-ground formation. At Byrnestpoort, an alluvial deposit is being worked; also one on the adjoining portion of the Elandsfontein farm. The area of diamondiferous ground is very extensive, though its thickness is not considerable.

The total quantity of diamonds found in 1898 in the Transvaal was 22,843 carats, valued at £43,730 ($212,812.04).

At the alluvial diggings, 12,283 carats, valued at £35,228 ($171,437.06), were found; while from the pipes, 10,560 carats, valued at £8,502 ($41,374.98), were obtained. The difference between alluvial and pipe diamonds consists in the fact that river stones are of a far better quality, and are generally larger.

CHARLES E. MACRUM,

PRETORIA, *July 26, 1899.* *Consul.*

INCREASE OF DUTIES IN THE TRANSVAAL: SOUTH AFRICAN TRADE NOTES.

Action is being taken by the Government of the South African Republic towards an increase of duties on such articles as blankets, boots and shoes, leather, harness, hats and caps, paraffin oil, etc. The increase is from 7½ per cent ad valorem (the present rate) to 10 per cent. The suspension of duties on food stuffs has caused, it is said, a scarcity of revenue.

TRADE OPENINGS.

East London will use in its new water supply 30-foot lengths of welded-steel tubing for the distance of 21 miles. An order has been booked by manufacturers in the United States for 10,000 kegs of wire nails. Orders will soon be given for a number of linotype machines. Several large orders for vehicles and agricultural implements have been also placed in the United States, and some of the vehicles are now arriving. The De Beers (diamond) Company is pleased with the American farm wagon with flaring top boards or sides. Many orders are being placed in Great Britain for boilers, air compressors, brick-making machinery, coal-mining machinery, dairy utensils, electrical machinery, engines, fire-extinguishing apparatus, flour-mill equipments, elevators, pumps, cold-storage plants, and in Canada for typesetting machines. An order for a winding engine for Rhodesia has been filled in Akron, Ohio.

Pretoria and Cape Town have decided to extend their electric plants by purchase of additional machinery. A contract for 950 miles of wire fencing, of seven strands with 7-foot poles, will soon be given by Pretoria, and an order for 1,500 tons of barbed and plain wire fencing has been placed in America.

Cash registers to the number of 345 were sold in South Africa in 1898. Large cold-storage plants will be erected in Durban, and the street-car lines there will be taken over by the municipality and electricity substituted. The lines are also to be extended. A new electric street railroad 11 miles in length will be built from Cape Town to the suburbs.

The White Star Line will soon have a regular service from Liverpool to Australia, calling at Cape Town. The steamers will have a tonnage of 12,000 tons burden and will be fitted with large cooling chambers to carry meat, fruit, etc.

American doors and sashes sent here are not properly packed or crated, and the railroads refuse to carry them, except at owners' risk. As the United States exports the bulk of doors and sashes, the makers should be very careful in packing.

Portable small houses or huts for natives would find a ready sale; a Scotch Company is now producing them. The following from the British and South African Gazette gives details on the subject:

PORTABLE HUTS FOR SOUTH AFRICA.

What in most cases will be regarded as the "eureka" of speedily improvised dwellings is the "Pioneer" hut, made by the Finnieston Engineering Company, Glasgow. This hut is made in a number of dissectible pieces, which can be put together by the most unskilled in a surprisingly short space of time and as easily dismounted and repacked ready for transport. The building when erected has a diameter of 10 feet, with a height to the eaves of 7 feet, and the whole, when packed, is contained in two easily transportable boxes. The hut is made of mild steel, with a strong pine floor, the sides being of "arc" sheets, jointed with tubes. The roof is formed of double-sheeted panels (the space between the double sheets being packed with nonconducting material), and jointed also with tubes. The hut is supplied with ventilating window, combined shutter and sunshade, and pine door. Provision for ventilation is ample; for, besides a perforated center plate in roof and swinging window, two ventilating openings are provided in sides, and it is perfectly weather tight. Altogether it has a most pleasing appearance, calculated to make an impression on the beholder, be he white man or native. Furniture in the shape of folding iron bedsteads, folding chairs and tables of iron and wood, and stoves with ash tray and chimney, are also supplied to order, so that the pioneer or traveler may acquire a complete house and household equipment which can be transported with the least possible trouble and cost. There can be no doubt that this "Pioneer" hut is destined to meet with a considerable sale among the large migrating and even stationary populations of South Africa, so soon as its merits become more fully known. An illustrated sheet showing in a clear, simple manner the method of erection is sent with every hut.

JAMES G. STOWE,
Consul-General.

CAPE TOWN, *July 26, 1899.*

PUMPS IN CAPE COLONY.

I have already called the attention of manufacturers of well drills, pumps, and windmills to the demand for wells and pumping apparatus by the farmers of this country,* and I now present some statistics on the subject. In 1890, the first boring was made in this country by a diamond drill for water, and from that year to the

*See CONSULAR REPORTS No. 218 (November, 1898), p. 458.

present time the government has carried on the work, owning the drills and charging a less price than the farmer would have to pay if he owned the drill. It is estimated that a successful bore made by the government costs the farmer £19 ($92.46), against £29 ($141.13) when he does the work himself, and more successful results have been obtained. The result has been, for 1898 alone, to add 3,000,000 gallons to the daily water supply of this colony.

The government is still inundated with applications, and with the present supply of drills the work can not be done fast enough. It is expected that by the time the applications now on hand are taken care of, 1,000 more will be waiting. It is an established fact that there is an excellent supply of underground water almost all over the colony at a reasonable depth below the surface. The rainfall of this colony is not greatly inferior to that of other countries. Several dams are being built, and in one over 1,400,000,000 gallons have passed through the sluices, and there is still sufficient water to fill the dam when completed.

The wells being bored will need pumping appliances of various kinds, and windmills appear to be the most inexpensive; those just arriving have been readily sold. The government may yet assist the farmers in purchasing such appliances.

In 1898, there were 19 government water drills at work; 206 applicants were served and 547 applied; 367 bore holes, 10 feet or more deep, were made; 26,573 feet were bored, the drills (19) making an average of 1,399 feet each; 258 holes produced 1,000 gallons per day and upwards; and the estimated total yield of water per diem was 3,000,000 gallons. In 106 holes, water flowed to the surface to the extent of 783,000 gallons per diem; and by pumping, a supply of 2,217,000 gallons can be obtained from the other 219 holes.

Recently, a large steam-power drill was purchased in England for the purpose of making a trial deep-bore hole. The first boring, when between 120 and 171 feet from the surface, struck a supply of water yielding 21,400 gallons per diem, and a steam pump failed to lower it. Another bore has been made to the depth of 1,504 feet and discontinued, owing to the exhaustion of the special fund set apart by the government.

I attach a copy (only one can be obtained) of the rules and regulations for the hire of drills owned by the government.*

J. G. STOWE,
Consul-General.

CAPE TOWN, *August 8, 1899.*

* Filed for reference in the Bureau of Foreign Commerce.

LIFE INSURANCE IN CAPE COLONY.

Under date of July 21, 1899, Consul-General Stowe, of Cape Town, transmits statistics showing the extent of life insurance in Cape Colony during the calendar years 1894–1897, the latest date for which figures were available.

The number of policies written up by the twenty-four foreign companies and the three home companies doing business in the colony was:

Year.	Foreign companies.		Home companies.	
	Number of policies.	Sums insured.	Number of policies.	Sums insured.
1894	13,056	$27,557,174	26,047	$23,819,786
1895	13,184	28,040,812	27,821	24,552,752
1896	14,182	29,668,685	30,106	26,361,991
1897	15,157	31,659,594	31,873	27,873,258

Mr. Stowe adds:

The average sum insured per head of the white population is now over £26 ($126.53). It is said no other country, with the possible exception of New Zealand, shows such an average.

December 31, 1897, the life assets held by foreign companies in securities in the colony amounted to $2,923,350, against sums insured amounting to $31,659,594. The annual premium income of all the foreign companies from business done in the colony is estimated at about $1,000,000.

SAMPLES OF UNITED STATES GOODS WANTED IN SYRIA.

Of late, considerable interest in American manufactures of various kinds has become manifest among Beirut merchants. This may be due to the fact that German export houses are drawing the lines tighter on Syrian commission merchants; or it may be attributed to the late war, which brought the United States into prominence even here in the Levant, where it was formerly known only vaguely and where nobody was aware of its industrial and commercial achievements. Articles commenting on our tremendous exports have been translated from French or, through the cooperation of the consulate, from American papers and published in the local Arabic sheets. In this connection, it should be remembered that while previously United States vessels laden with petroleum, furniture, hardware,

cotton goods, cordage, lumber, and flour have visited this port, no United States ship has been seen in these waters since 1880, excepting men-of-war and pleasure yachts. This new interest in American affairs has also been aided by the growing Syrian exports to the United States, the emigration, the agitation for direct steamship facilities, etc. The present time seems favorable for a move on the part of American manufacturers to meet this sentiment and take advantage of it.

The merchants here want samples, and will not, except in rare cases, buy from catalogues. Samples should cover, I should say, as far as practicable, flour, iron, petroleum, lumber, mechanics' tools, kitchen utensils, carriage springs, hardware in general (nails, screws, locks, etc.), pumps, windmills and hydraulic rams for irrigation, lamps, clocks, furniture (chairs, desks, and iron bedsteads), cotton goods (cheap and showy prints and heavy cloth for tents, awnings, sails, and shoes), canned provisions and prepared cereals, patent medicines, paints, leather and saddlery, paper (print, packing, and stationery), shoes and slippers, crockery, bicycles, toys, and notions.

I would recommend that such samples be sent—the sooner the better—to Mr. Fried. Wehner, an old trading and banking house in Beirut, which enjoys an excellent commercial reputation, and the financial standing of which, according to the Imperial Ottoman Bank (Beirut), is very high. I have before me a written pledge, dated May 12, 1899, and addressed to me, in which Mr. Wehner (whose affairs are now being conducted by Mr. Hummel, the honorary consul-general of the Netherlands in Syria) says:

> I declare myself to be ready to accept the deposit of the samples which American mercantile associations may be disposed to intrust to me, and to do my utmost in order to procure the best business transactions, not only at Beirut, but also for all the markets existing in Syria and Palestine. The experience I acquired during thirty years' work in this country allows me to guarantee full success on condition that the prices allow competition with European houses. Being also ready to furnish any information, I have the honor, etc.

If American manufacturers adopt the suggestions herein contained to the extent anticipated, a separate sample room will be set apart by Mr. Wehner for our goods. No charge will be made, as the house expects to make a profit on future orders, besides buying, for their own account, American goods which prove to be popular. Manufacturers or exporters at home will, of course, pay the freight on the samples or the post-office charges, as the case may be; also the duty, amounting to 8 per cent ad valorem on a low valuation, except on samples of cloth, which are admitted free up to a weight of 5 kilograms (11 pounds). There will also be a slight charge for port dues, lighterage, and porterage. Samples of value will in due

time be sold for the benefit of the owner, at the best obtainable prices. An employee of the consulate will devote half of his time to the promotion of the trade which such an agency will presumably help to create, and the consulate will, of course, continue to give the matter of introducing American goods its careful attention.

If, in conjunction with the establishment of a sample room under these circumstances, a direct line of steamers could be induced to operate regularly between New York and the Syrian coast, touching either outward or homeward bound at Alexandria, a decided advantage would be gained for American foreign trade. As already stated in CONSULAR REPORTS (by Consul-General Dickinson, at Constantinople*), Barber & Co., Produce Exchange, New York City, have inaugurated a line for Smyrna, Constantinople, and Black Sea as well as Grecian ports. One of their steamers is now on its way, sailing direct from New York to Beirut. It will call at Alexandria on the return trip. Another steamer of the same company leaves New York for this port about July 10. This route should be permanently adopted, and it rests with American manufacturers to bring about this important result.

G. BIE RAVNDAL,
Consul.

BEIRUT, *June 20, 1899.*

OLIVE OIL IN SYRIA.

Physicians at home have written me occasionally, inquiring as to the price of Syrian olive oil, saying in effect that they need pure olive oil in their practice and that such an article is scarcely to be found in American drug stores, where adulterated French and Italian olive oils prevail. One of these gentlemen informs me that good olive oil is being successfully used in place of cod-liver oil for medicinal purposes. Another correspondent, who deals in olive oil for the table, repeats the old story that most of the so-called high-grade olive oil sold in the United States is Syrian, North African, and European olive oil mixed with cotton-seed oil exported from the United States to France and Italy.

So far as my consular district is concerned, the olive-oil industry is an important and a growing one. The natives are learning by degrees how to properly cultivate, harvest, and press the precious fruit. The American colonists at Haifa seem to have proven that by judicious management the olive tree can be made to bear fruit every year; and that by picking the olives from the trees, instead of beating them roughly down with sticks and stones—by which method

*See CONSULAR REPORTS No. 224 (May, 1899), p. 76.

the trees suffer great damage and the fruit gets soiled—also by carefully selecting the olives when picked, laying the unclean ones aside and reducing the heaps to prevent fermentation, and by the introduction of modern olive presses, the industry may be made very profitable.

Of late, some inquiries have been made at this office by commission agents in regard to American olive presses, and catalogues have been applied for. This is a healthy sign. I have reason to think that considerable American machinery of this kind can be sold in Syria, provided the present direct steamship connections are kept up (Barber & Co., Produce Exchange, New York City).

There are olive groves all over Syria and Palestine, but especially along the littoral. Some of the largest ones in my district are to be found in the vicinity of Nablous in Samaria, in the Akka district, and near Beirut, Tripoli, and Latakia. The Shwayfat grove (just outside the city limits of Beirut) alone produces in an average-crop year about 2,240,000 pounds of oil, valued approximately at $114,000. In the Tripoli neighborhood, the production of olive oil was 4,386,000 pounds in 1897 and 708,000 pounds in 1898. The Akka district produces annually from 1,000,000 to 2,500,000 pounds. This gives no idea, however, of the total output in all of Syria. Such information can not be obtained.

A few weeks ago, 3 barrels of olive oil were shipped from here to Detroit, Mich., by order of a prominent American chemist who traveled through Syria last spring. The direct olive-oil exportations from this port, as shown by the invoices, have been of little importance, although frequent, and especially intended for Syrian consumption in America. This oil is of but a moderate degree of excellence.

Perhaps the most profitable use Americans can make of the Syrian product is to import in bulk the purest native oil which the market affords, subject it to the best modern methods of purification and clarification, and finally retail it in bottles. A certain amount of olive oil is shipped to the United States from Smyrna, I am informed by the United States consul at that port, in barrels containing something like 250 oke, or 700 pounds, each.

Struve & Co., at Haifa, an American firm, manufacture both soap and table oil, which competes successfully with the best French oil and sells readily in New York to the extent of some 700 gallons a year. The average price of common oil here varies between 4½ and 5½ piasters per oke (15¾ to 19¼ cents per 2¾ pounds). Struve & Co. sell their oil at 98 cents per gallon in Haifa. The freight from there to New York has averaged about 75 francs ($14.48) per ton, gross weight.

I am told that a French concern has lately started an oil mill at

Yafa which produces a better olive oil than the common oil sold here. It ships to France.

The United States consumes practically all the wool, licorice root, and bitumen exported from Syria and most of the Syrian raw silk (sent via France), besides some Syrian wine and olive oil. I see no reason why the silk and the olive oil should not be sold and bought direct, as is the wool, without the intervention of French middlemen. Direct dealings would prove equally advantageous to American manufacturers and the growers here.

G. BIE RAVNDAL,
Consul.

BEIRUT, *July 12, 1899.*

IVORY MARKET AT ANTWERP.

Consul-General Lincoln writes from Antwerp, August 4, 1899:

At the third quarterly sale held on the 2d of August, the ivory offered and sold was as follows:

Kongo:	Pounds.
Hard	122,997
Soft	7,262
Angola	24,341
Gaboon	4,937
Benguela	520
Senegal and Gold Coast	677
Total	160,734

The totals for the corresponding quarter of preceding years were:

	Pounds.
1898	78,393
1897	158,142
1896	117,743
1895	136,685
1894	94,980
1893	139,011

The prices realized at the London sales last week were exceeded by from 7 to 10 per cent for the heavy and medium weight tusks, or about 28 to 38 cents per 2.2046 pounds. Tusks for bangles, heavy, realized an increase of about 10 to 38 cents; those for balls, from 19 to 38 cents. The scrivailles were sold with an increase of about 10 cents and the soft ivory about 57 cents per 2.2046 pounds. On the other hand, the tusks for bangles of the light variety decreased somewhat in price.

The stock on hand at the present time is given as 224,869 pounds, as compared with 174,628 pounds in 1898, 154,322 pounds in 1897, 125,662 pounds in 1896, and 317,462 pounds in 1895.

The next quarterly sale will be held on the 31st of October.

COLLECTION OF DEBTS IN THE NETHERLANDS.*

There are two methods of collecting outstanding debts in the Netherlands, viz:

(1) Before the "kantongerecht" (court of justice of the peace for a district comprising several municipalities) when the amount to be collected is less than 200 guilders ($80).

(2) Before the "arrondissement rechtsbank" (superior court of a large district) for amounts above 200 guilders.

Frequently, when a bad debt has to be collected, it is advantageous to demand of the justice of the kantongerecht that the debtor be declared insolvent. When a debtor is desirous of avoiding insolvency and is in a position to prevent it by applying his own means or by raising means from others, he will generally do so in order to preserve his good name and standing. It may also be necessary to demand the insolvency of the debtor, in order to prevent some creditors being more benefited than others, and to secure a just and even liquidation of the financial obligations of the debtor. The legal manner of collecting bad debts is therefore by suit in the kantongerecht or arrondissement rechtsbank, but frequently the purpose is reached sooner by the intermediation of trustworthy representatives. Paragraphs 97 to 126 of the wetboek van burgelijke regtsvordering (civil code) deal with suits brought before the kantongerecht; paragraphs 126 to 321 of the same code with suits brought before the arrondissement rechtsbank. Information on the subject is, however, found through the whole code; paragraphs 430 to 611, for instance, relate to the several manners of executing judgments.

To give a correct estimate of the expenses entailed in suing debtors is impossible, as in every cause the expenses vary on account of attending circumstances. For suits brought before the arrondissement rechtsbank for amounts of 200 guilders or more, figures can not be given. Expenses for suits brought before the kantongerecht for amounts less than 200 guilders are usually not very heavy, being generally from $12 to $20, including the execution. If, however, the defense is long, the expenses will be increased. The length of the suit depends principally upon the delays which are granted to the parties, in order to draw conclusions or to make explanations. As the delays can be granted only by the judge, the impression made on him by the defense is of great importance. Usually,

*Copy of a report made in answer to inquiries by the Philadelphia Commercial Museum, to which the original has been sent.

lawsuits before the kantongerecht take but a few weeks, or a couple of months at the most; but there are exceptions. The expenses to be incurred are:

Summons.—Every case commences with a summons, the cost of which varies between 3.50 and 10 guilders ($1.50 and $4). When a deurwaarder (a bailiff who serves papers and acts as a constable in civil cases) is domiciled in the place where the defendant resides, the cost of a summons generally does not exceed 4 guilders, or $1.60; but if the summons has to be served by a deurwaarder of a neighboring place, the cost is higher, according to distance.

Judgment.—The cost of a judgment does not generally exceed 5 guilders, or $2—that is, if the defendant does not defend himself; but if the defendant prolongs the suit by interlocutory proceedings, the examination of many witnesses, etc., expenses arise which depend upon the course that affairs take.

Registration.—After the judgment, a registration tax of 2 per cent over the sum entailed must be paid. Before the judgment can take effect, it is necessary to serve a sealed and certified copy of the judgment on the defendant. This copy, called "grosse" or "expeditie," costs, for judgments in cases where the defendant has not appeared, not more than 4.30 guilders ($1.72). The cost of serving this paper when the defendant resides at a place where a deurwaarder is domiciled is seldom more than 6 guilders, or $2.40; but when the aid of a deurwaarder of a neighboring place must be called in, the costs are higher, according to distance.

Arrest.—The cost of seizure of the personal estate of the debtor is from 15 to 20 guilders ($6 to $8), sometimes more—all depending upon whether a deurwaarder is domiciled at the place. The auction sale of the personal property takes place under the supervision of court solicitors. After seizure of personal property, the auction sale to take place is communicated to the public by bills posted in the streets and by advertisement in a local newspaper; and if there be no local newspaper, then in the paper of a neighboring town. The cost of bill posting is generally not more than 10 guilders ($4), while the cost of the advertisement varies with the different newspapers. A custodian is appointed immediately after the seizure of the property (personal); sometimes the defendant himself is appointed, but in many cases this is not advisable. The custodian receives, in accordance with the custom of the place, from 1 to 1.50 guilders (40 to 60 cents) per day. The expenses of the judicial auction sale are from 15 to 25 guilders ($6 to $10).

In suits brought before the arrondissement rechtsbank, the manner of suing is more complicated; the conclusions are written, and postponements are frequently given. The expenses of proceeding

depend entirely upon the course the suit takes and upon the defense. Nonappearance of the defendant makes the suit very short.

Messrs. Van der Graaf & Co., of this city, make the collection of bad debts a specialty.

Representative lawyers of Rotterdam are: J. C. Reepmaker, 93 Boompjes; Th. A. Fruin, 142 Wynhaven; Loder & Bik, Geldersche straat; E. E. van Raalte, 4 Willensplein.

S. LISTOE,

ROTTERDAM, *April 24, 1899.* *Consul.*

COLLECTION OF DEBTS IN HUNGARY.*

The limitation for the collection of debts is thirty-two years from the day of the receipt of the goods and invoice thereof, allowing time for transmission of payment to creditor (Law XVIII, 1893). The right to collect an unpaid draft and the right to interest on a draft are limited to three years from the legal date of payment, the period being, however, extended three years if judicial proceedings are begun within the first three years (Law XXVII, 1876). Commercial debts as such can not be sued for between registered firms after ten years, or between a firm and a private person after two years, except as single private debts. The advantages of commercial suits within the briefer periods are the evidence of authentic ledger extracts and exemption from full affidavits to the facts.

The initial step to the recovery of a debt is the taking of a protocol of the case by the clerk or judge of the court, if the sum is under 500 florins ($203)—when over that sum a lawyer must conduct the case from the beginning—in the place where the debtor resides. The defendant's goods can be attached before or after the hearing of the case, according to the urgency proved to the court. Cases of debt are not tried before juries; but if the debtor has accepted in writing at any time the jurisdiction of a noncivil court, the same holds good, except in the case of drafts.

A lawyer's charges are adjudged by the court upon his statement; but expenses incurred for clients outside of court must be paid as per agreement. The court determines those charges also according to the lawyer's statement of services performed. The expenses at court, including lawyer's plea, are from 20 to 50 florins ($8 to $10). The revenue tax on each document required or executed in the case varies from 10 kreutzers to 5 florins (4 cents to $2). A debtor can be compelled to pay both revenue tax and lawyer's charges.

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*Copy of a report made in answer to inquiries by the Philadelphia Commercial Museum, which has received the original.

Debts over 500 florins ($203) in amount must be sued for at county or city courts, unless it has been agreed in writing to try them at lower tribunals; debts under 500 florins, at district courts only. Commercial debts come first to commercial courts, where they exist (*e. g.*, in Budapest). Joint-stock companies can sue as such. Documents from the United States, to be legal in Hungary, must be authenticated at some Austro-Hungarian consulate. Hungarian translations may be required of any documents drawn up in English. The United States consulate at Budapest is authorized to make all such translations required by Hungarian authorities under the consular convention of 1870.

Money known to be owing to a debtor can be attached by a warrant from the court after petition therefor.

F. D. CHESTER,

BUDAPEST, *June 14, 1899.* *Consul.*

COLLECTION OF DEBTS IN GREECE.*

There is a statute of limitation. The period varies, in accordance with the classes of debts, from three to thirty years. The first step in the recovery of a debt is to commence an action against the debtor in the civil courts. A defendant's goods may be seized under execution, either by virtue of a judgment of the court or by an execution issued by a notary public and containing the formalities of an executory decision. Actions for debts are not tried by juries.

Lawyers' charges are based on the value of the services rendered. Bills of cost are taxed by the judges only when the clients think the attorney's charges are too high. A debtor can be made to pay the costs of collecting a debt.

Debts are recoverable before the "court of peace," the "court of first instance," or the latter court acting as a "commercial court," according to the nature of the debt and the sum involved.

A joint-stock company can sue in the name of the company. Legal documents sent from the United States as authorization or proof of a debt should be attested by a Grecian consular officer. Where money is known to be owing to a debtor, it can be attached by garnishee proceedings, similar to those in the United States. Imprisonment for debt is practised extensively in Greece, the debtor being obliged to remain in prison until the debt has been paid.

D. E. MCGINLEY,

ATHENS, *April 25, 1899.* *Consul.*

*Copy of a report made in answer to inquiries by the Philadelphia Commercial Museum, to which the original has been sent.

COLLECTION OF DEBTS IN JAMAICA.*

There is a statute of limitations in Jamaica; six years must elapse before the right to bring an action on simple debt is barred.

The initial step to the recovery of a debt is the filing of a writ of summons in the supreme court, when the amount claimed exceeds £50. When the amount claimed does not exceed £50, a plaint is issued in the resident magistrate's court. There are fourteen parishes in the island, and in each parish there is a resident magistrate's court having limited jurisdiction, as above.

Defendant's goods can be seized under execution, on judgment obtained either in the supreme court or the resident magistrate's court. A writ of seizure and sale is issued, under which the bailiff of the court seizes the defendant's goods and sells them to satisfy the judgment.

No case goes before a jury unless it is contested. In the supreme court, judgment can be obtained on summary application, based on an affidavit in proof of the debt, unless the defendant satisfies the court that he has a good defense on the merits or gives security for payment of the amount claimed.

In the supreme court, contested cases are tried before a judge without a jury; but any party to a suit, if he desires, may have the case brought before a jury. Cases in the resident magistrate's court are tried before the resident magistrate without a jury. Judgment in uncontested cases in the resident magistrate's court can be obtained in a summary manner. The jury can be relied on to act fairly. In important cases, it is generally thought desirable to obtain a special jury, consisting of justices of the peace and the better class of householders, and such juries may be regarded as beyond reproach, so far as integrity is concerned.

No scales of fees are provided by law in either the supreme court or the resident magistrates' courts. Bills of costs in both courts are taxable by an officer of the court.

Solicitors as a rule are not prepared to undertake work in the resident magistrate's court for the fees laid down by law, which are considered very inadequate remuneration. The following sample cases will convey an idea of the charges in the supreme court: Uncontested action, no appearance by defendant, costs, say, $35; appearance by defendant, judgment obtained on summary application, say, $50. In contested actions, it is impossible to give an idea

* Copy of a report made in answer to inquiries by the Philadelphia Commercial Museum, which has received the original.

of costs. They depend upon the number of witnesses, the quantity of work to be done, and the time occupied in hearing the case.

The unsuccessful party in a case has judgment entered against him for costs to be taxed "as between party and party." There are items of work necessary to be done which do not form items of a party-and-party bill of costs, but are recoverable by the solicitor against his own client. These expenses, as a rule, are not heavy.

A joint-stock company can sue in the name of the company. Legal documents sent from the United States as authorization or proof should be attested before the British consular officer. It may be generally stated, however, that all documents necessary to prove debts should be prepared by the solicitor having charge of the matter in Jamaica. Documents prepared in anticipation of proceedings and forwarded with instructions to proceed are invariably found to be useless and inadmissible in evidence.

Both in the supreme court and the resident magistrate's court garnishee proceedings can be taken to attach moneys owed a debtor.

LOUIS A. DENT,

KINGSTON, *June 27, 1899.* *Consul.*

COLLECTION OF DEBTS IN SALVADOR.*

Consul Jenkins writes from San Salvador, July 8, 1899:

A statute of limitations exists, the length of the period being governed by the nature of the debt. Defendant's goods can be seized under execution by embargo. In civil cases, a jury does not determine cases. All writing is done on stamped paper, a source of revenue to the Government.

Lawyers' charges are based on value of services rendered and the amount involved. When lawyers proceed extrajudicially, there is no tariff. Bills of cost are taxable by the courts.

A debtor can be compelled to pay the cost of collecting a debt when the proceedings are by suit.

Debts are recoverable before the court of la instancia (district court).

A joint-stock company can sue in the name of the company.

Legal documents sent from the United States to this country must have the last signature attested by a notarial acknowledgment by either the minister, consul-general, or consul of Salvador accredited to the United States.

Where money is known to be owing to a debtor, it can be attached by embargo. No garnishee order can be made on a person owing the debtor.

* Copy of a report prepared at the instance of the Philadelphia Commercial Museum, which has received the original.

COLLECTION OF DEBTS IN PARAGUAY.

For some time, I have been studying means by which American merchants can safely conduct trade in Paraguay and at the same time collect their debts. The following points refer to the collection of debts by legal process:

(1) There is no statute of limitation.

(2) The first step in the recovery of a debt is to bring the matter before a justice of the peace if the debt be small; if it be over $500, it must go before the civil court of first instance. Debts are always recoverable before one of these tribunals, according to their nature and character.

(3) The defendant's goods can be seized under execution by means of an embargo laid upon the goods by order of the judge.

(4) No cases of debts are tried before a jury.

(5) Lawyers and attorneys arrange with their clients as to charges or commissions, generally observing the laws of contract. In case there be no agreement between lawyer and client, or the agreement is contrary to the law and can not be fulfilled, the account may be presented to the judge; but it must not exceed 25 per cent of the total value of the matter in litigation. If those who have to pay an account do not accept it, the judge may order a reappraisement. Any decision given by the judge is subject to appeal.

(6) The debtor can be compelled to pay the costs of collecting debts.

(7) A joint-stock company with a legal personality, or, in other words, a company recognized by the Government and registered in the book kept in the court of commerce, has a right to sue in the name of the company.

(8) All legal documents to be used in Paraguay must be attested before the Paraguayan consul in the United States, and, in default of this, before a consul of any other nation.

(9) Where money is known to be due, it can be attached in satisfaction of the debt. A garnishee order can be made against the person owing the money, by applying to the respective courts.

The legal fraternity here is able and learned, and any business confided to their hands will be attended to promptly.

The main hindrance to the collection of foreign debts is the difficulty experienced in securing gold with which to purchase foreign drafts. This is especially the case in paying debts due to the United States. The importers and merchants here have sufficient means and money—that is, Paraguayan money—but the money of

Paraguay is based on paper, while foreign purchases must be paid in gold. Now, when a merchant desires to liquidate an American debt, he has to pay an exorbitant price for gold, as all the gold in the country is in the hands of a few persons.

So anxious are the leading men of Paraguay to relieve this gold stringency, which is almost prohibitive of American trade in the country, that one of the foremost merchants of Asuncion stands ready to mortgage the principal building in the city for three or four years and pay 6 per cent interest to any capitalists who will place in any reliable bank in the United States $60,000 subject to his order, on which he can issue drafts to Paraguayan importers who desire to pay their debts in Europe or in the United States. The building cost to erect, together with the grounds on which it is built, $100,000.

This will illustrate the desire of the merchants of Asuncion to overcome the difficulty which now stands between them and enlarged foreign trade.

JOHN N. RUFFIN,

ASUNCION, *June 20, 1899.* *Consul.*

COTTON TEXTILES IN PARAGUAY.

Consul Ruffin, of Asuncion, under dates of May 31 and July 20, 1899, reports as follows:

Cotton textiles represent the largest import into Paraguay. In 1898, they were imported to the value of $186,325.02 gold, the duty being 38 cents* per kilogram (2.2 pounds). The clothes of the poorer classes are almost all of cotton. Many varieties are sold.

Most of the goods come from England and Germany. The lack of direct banking facilities is an obstacle to American trade. I think, however, the "Banco Mercantil" does a limited business with a New York firm. Sometimes, the merchants here have plenty of Paraguayan money with which to meet bills; but the inability to buy drafts delays payments, besides enlarging accounts by the addition of interest.

A good investment for American capital would be the establishment of a cotton factory here. The land is suited to the growth of cotton. Texas cotton introduced here grows more abundantly and satisfactorily than all the other cotton imported for experimental purposes, and almost as well as it grows at home. There is no cotton factory in the country.

* Duties payable in gold or its equivalent in paper, the latter, very much depreciated, the currency in general use.

PERCALES, OR PRINTS.

Many kinds of cotton prints come to Paraguay. This market is subject to the usual variations as to color of goods, design, etc. American manufacturers know that the seasons here are directly the reverse of those north of the Equator. For instance, the winter months of December, January, and February in the United States are the hot months south of the Equator. Thus, the styles which prevail in July at home could be introduced with safety into this market next December, and the styles of spring would come in for the market in Paraguay next September, and autumn patterns would be welcomed in April and May. It can, therefore, be seen that the surplus of cotton prints from the past season might be used here. All kinds of prints reach this market, but I will describe only a few staple articles.

COLOR.

There are three standard colors here, which can be taken as the bases in making designs for the Paraguayan market. Our merchants must cater, as do the Germans especially, to the peculiarities and tastes of the Paraguayans. For instance, there are two great political parties here, namely, the "Colorados," or "Liberals," and the "Azules." I am told in different sections of the Republic (I have just made a visit to the chief commercial centers) that where the Colorados predominate, the people prefer the red colors, and prints having them in any design have more sale than others. Where the Azules predominate, the blue-colored prints are in demand. The blue or red, as the case may be, must be a bright, fast color, and must serve as the base. The three colors are: (1) Rosados, or rose, up to the most pronounced red; (2) azul, or blue, from sky blue (celestia) to the most pronounced fast blue; (3) coffee, varying from light to dark. Red seems to be the most salable. The Colorados, I am told, have been in power for many years. Dark colors are not much sold, except as mourning goods, as they intensify the effect of the semitropical sun. Large and small figures, checks, dots, etc., find sale.

The widths most salable here are 26 and 27 inches; but a good 25-inch cloth can be sold, with the price correspondingly reduced. The prints can vary from 24 to 27 inches.

The length can be 24 yards (21.95 meters). Both measures ought to be stated. A 20-yard (18.29 meters) piece would be welcomed. Merchants here state that goods of short lengths sell quickest. The goods might be sent in 50-yard (45.72 meters) pieces, to be cut in half.

The most salable cotton prints have 64 by 56 and 64 by 64

threads to the square inch. Inferior goods have starch, so as to give them solidity. In this, the Manchester mills seem to excel, putting a very cheap but nice-looking print on the market. The people do not inquire about the intrinsic value of goods; the thing they notice is the appearance. As a gentleman here said: "Manchester clay is cheaper than cotton." When American goods are washed the superiority appears, but of this the buyer seems to take no note. So long as the goods look well, they will have a good sale, irrespective of quality.*

CREDIT.

The credit system extends all over South America. The time given is usually six months from date of invoice; sometimes eight and nine months are granted with goods placed f. o. b. river boat in Montevideo for Asuncion, four months' interest at the rate of 6 per cent per annum being charged.

CUSTOMS OF TRADE.

Everybody in the mercantile business in Paraguay buys by the meter and sells by the vara. The retail merchant has an advantage in this way. There are 100 centimeters in a meter and 86 in a vara (meter, 39.37 inches; vara, 33.858 inches). Thus, if a Paraguayan retailer buys for 80 cents paper (10 cents gold) a meter of cloth and sells it for $1 paper a vara, he gains not only 20 cents but 16 centimeters (6.3 inches).

Few merchants buy cotton prints in Europe. New designs are always coming into the market, and a merchant does not want old ones on his hands. He prefers to go to Montevideo or Buenos Ayres every six months, or have his agent keep him supplied with the incoming styles. Besides, the fluctuation of money makes trade with Europe risky. If a merchant buy at 8 or 7.50 (paper money), and if when the goods arrive gold should happen to be down to 7, he will lose much of his profit. The merchants, in order to avoid this hazard, prefer to buy their goods in Asuncion, in order to make quick sales. If our merchants would watch the new styles and ship all assortments possible in the colors described to some reliable agent, they would get a full share of the large trade in cotton prints which this country has with the outside world. This is a new field, worthy of the attention of United States merchants.

There are few bankruptcies in Paraguay, and the houses pay well. There are many responsible firms here. Wholesale merchants usually fix their price at the rate of from 7.50 to 8, so that the exchange

*This might be the case so long as the Paraguayan purchaser had only showy clayed goods to select from, but it would surely not be the case where he could compare the results, in wear and tear, with pure American cottons, equally as showy.

does not affect them so much. Thus, if they buy goods at 7 (that is seven Paraguayan dollars to one gold dollar), they mark their prints 8, so that if exchange goes up to 8 they come out even, as gold very rarely goes higher than that. The merchants here endeavor to buy at the cheapest rate, so as to mark their goods as low as possible.

To open trade, a United States firm might enter into partnership with one of the old firms here. Quevedo y Cia., in Concepcion, is said to own 35,000 head of cattle and immense tracts of land, and has a large trade. Other firms are Del Pino; Santos y Molino, of Villa del Pilar; Brun y Cia., Angulo y Cia., Gomez y Cia., Gaona y Urrutia, Braga y Cia.; Nardi, Ysasi y Cia., of Asuncion; and Señor Enrique Plate, who writes and speaks English, has been in the commission trade here for many years.

In Villa del Pilar, in the southern part of the Republic, lives a large orange exporter of United States birth, who will be glad to give information to merchants who may write him. His name is Mr. Albert G. Jones.

DUTIES.

The duties on cotton prints, or percales, as they are called in Spanish, is 20 per cent of the value per kilogram (2.2046 pounds), and a kilogram of cotton prints is valued at 90 cents. The measurement is always in kilograms.

IMPORTATION.

Last year, the importation of cotton prints alone amounted to $78,169.50 gold, the quantity being 86,855 kilograms. Prices should be quoted c. i. f. Buenos Ayres or Montevideo, including packing, etc., net; no documents. Goods are sold in bond in gold at six months from date of invoice, a draft being signed. The freight from New York to Buenos Ayres or Montevideo is 28 cents gold per cubic foot.

UNITED STATES CAPITAL IN VENEZUELA.

I submit the following information relative to enterprises contemplated and under way in my district, in which United States capital is invested or solicited:

The American Distilling Company, having a concession from the Venezuelan Government covering the right to make whisky, etc., is calling the attention of capitalists in the United States to the enterprise. I am informed that the capital necessary for equipping distilleries in Caracas, Valencia, Puerto Cabello, and cities of equal importance has been assured.

The concession for a railway between Puerto Cabello and San Filepe, through the State of Yaracuy, is in the hands of men who feel confident that they will interest capitalists of the United States. In fact, I am informed that the necessary capital is nearly all secured. If completed, this railway will tap virgin country, and bring to foreign markets the coffee, cocoa, hides, fruits, etc., of plantations that have been practically isolated.

The quarries of the Ganango Marble Company, of Puerto Cabello, are on the coast, about 5 miles east of Puerto Cabello. They produce a white marble, pronounced equal to the "Carrara," and beautiful colored marble. I understand that United States capital is invested herein, and that arrangements are now under way that will insure the opening of the quarries in a proper manner.

The Yaracuy River concession covers the navigation of the river of that name. The mouth of the river is about 12 miles west of Puerto Cabello. This river flows through a section of Venezuela that is rich in plantations of cacao, coffee, cattle, bananas, oranges, etc., and there is much valuable timber on its banks. It is navigable for river steamers and boats for a distance from its mouth of over 100 miles, and passes by many large cities and towns. Gen. José Ricart, of Caracas, owns the concession. I am informed that he is communicating with capitalists in the United States, with the object of putting on the river suitable steamers and boats to bring to Puerto Cabello the products of the plantations.

Quite recently, the Congress of Venezuela granted a concession of about 7,500 acres of land, located between the rivers La Palito and Capadare and bordering on the Gulf of Triste, about 6 miles west of Puerto Cabello, for banana-raising purposes. The owner of this concession intends to divide the land into six banana plantations. Included in the concession is the right to lay railways, put up telegraph and telephone lines, and ship to foreign ports direct, the Venezuelan Government placing a customs officer on the train. I am informed that the owner of this concession is soliciting capital in the United States, and that his prospects for securing it are excellent.

The manager of the Tocuyo River Navigation Company, Mr. George Upton, of Warren, Ohio, has just returned from a business trip to the United States. This company has a concession to navigate the Tocuyo River, and to hold land along its banks. It has in this harbor two river steamers and a barge. Operations will doubtless be commenced shortly.

Count Emil Lewenhaupt, of Sweden, and Baron Eggers, of Denmark, are in Puerto Cabello, looking up the property of a syndicate of Europeans, which was purchased from the Government of Ven-

ezuela over thirty years ago, but which has not been taken possession of by the purchasers. The deeds call for all of the land on one side of the Tocuyo River, which is several hundred miles in length and the mouth of which is on the north coast of Venezuela, at a point some 30 miles west of this port.

LUTHER T. ELLSWORTH,

PUERTO CABELLO, *August 7, 1899.* *Consul.*

VENEZUELAN LAW ON FOREIGN CORPORATIONS.

Consul Plumacher, of Maracaibo, on August 3, 1899, sends translation of a recent law, by which all foreign corporations operating in Venezuela are bound to give security for their actions and to pay a certain tax. The text of the law follows:

[Translation.]

The Congress of the United States of Venezuela decrees:

ARTICLE 1. Foreign corporations which wish to establish agencies in Venezuela, whether they are represented in the country or not, shall be obliged to comply with the formalities required from native firms; and if they are stock companies, they shall register and publish in the local papers their contract and other documents at the place where the agency is established, in order to constitute the company according to the national laws. They shall also forward to the archives of the register office a copy of their statutes.

Paragraph 1.—Foreign societies established in Venezuela shall observe the dispositions contained in article 26 of the civil code and also articles 101, 102, 103, and 104 of the code on civil proceedings.

Paragraph 2.—Any modification to the contract shall be registered and published according to the first part of this article.

ART. 2. Insurance companies which enter into negotiations in Venezuela shall establish a responsible agency at the capital of the Republic, and life-insurance companies shall give a bond equal to the total amount of their policies issued in the country. In order to comply with these conditions, the agency shall forward every six months to the Department of Agriculture, Industry, and Commerce a statement of the persons who have taken policies and the amount of the same. The bond shall be registered in the subregister's office of the district in which the agency is established.

ART. 3. Administrators, agents, representatives, or any other person who contracts in the name of the company shall be held personally responsible for compliance with the provisions of articles 1 and 2.

Sole paragraph.—Persons who contract in the name of life-insurance companies, who have neglected to comply with what is prescribed in article 2, shall be subject furthermore to a fine of from 1,000 to 10,000 bolivars ($193 to $1,930), or to arrest.

ART. 4. Foreign companies which now have agencies, branches, or representatives in Venezuela must comply with the provisions of article 1 within the term of six months, counting from the date on which this law is promulgated.

Life-insurance companies shall comply with the same formalities within the same period of time as per article 2.

Given at the Legislative Federal Palace in Caracas on the 14th day of April, 1899, eighty-eighth year of independence and forty-first of federation.

PROPOSED STEAMSHIP LINE FOR ARGENTINA.

The Department has received from Mr. Merou, the Argentine minister, under date of Nahant, Mass., August 9, 1899, copies of a proclamation of the President of the Argentine Republic, calling for bids for the establishment of a coast line of steamers in that country. The conditions are stated as follows:

I.

(1) The company, during the first two years of the contract, shall have at least three steamboats in service, each to have a minimum capacity of 1,500 tons.

(2) At the end of the first two years, two more boats of the same minimum capacity must be added.

(3) The plans for the boats must be approved by the Executive Power. If they are intended to transport cattle, they will be subject to the regulations which the Executive may impose. The boats must comply with all the conditions necessary for good navigation, in so far as material as well as accommodations for cargo and passengers are concerned.

(4) All the boats of the company must bear the national flag.

(5) Service shall be rendered between Buenos Ayres or La Plata and the following ports on the southern coast: Puerto Madryn, Cabo Raso, Bahia, Bamarones, Rada Tilly, Deseado, San Julian, Santa Cruz, Gallegos, San Sebastian, Ushuaia, as well as others which it may suit the company to include in the service.

(6) Besides the steamship line to which the previous conditions refer, the company should establish, within a year, a coast service between the ports above named. The company shall keep at least ten boats, sail or steam, in this service.

(7) The boats shall leave Buenos Ayres or La Plata at least every ten days, and the round trip of each boat between Buenos Ayres or La Plata and the ports named, as far as Ushuaia, shall not last longer than thirty days, except in cases of force majeure.

(8) The company must construct, in each of the ports where its ships find roadstead, covered places of deposit large enough for the storage of the cargoes to be brought into the ports. This condition must be fulfilled within six months from the date of the establishment of the steamship service, and the company will be subject to a fine of 500 pesos of national money for each month of delay in the preparation of the depositories.

(9) It must also construct in each port and maintain in good condition a wharf or quay, in the locality fixed by the Executive. This condition must be fulfilled within the same term and subject to the same penalty as the one specified in the preceding paragraph.

(10) The company must receive in the depositories referred to in article 8 all the cargo it contracts to carry, and is responsible for the same from the time they enter the depositories.

(11) Besides the terms established in the preceding conditions, the company will have the following:

(*a*) For signing the contract, one month, counting from the publication of the contract.

(*b*) For presenting the plans of the boats, as set forth by article 3, three months, counting from publication. If the plans are disapproved by the Executive, the company will have two months longer from the date of the decree in which to present new ones. If the Executive takes no action within two months after the presentation of the plans, they will be considered approved in the form in which they are presented by the company.

(*c*) For beginning the service, nine months, counting from the date when the plans are approved or when they are considered approved, as just set forth.

(12) The company must carry mail free of charge and must transport goods belonging to the Government or passengers in Government service at a charge of 25 per cent less than the established tariff.

(13) The boats of the national fleet can not receive cargoes for individuals at the ports named in the contract from the time the stipulated service is established. If such cargoes are received, the Government must turn over to the company the amount of the freight charges which would have been paid thereon.

(14) Other conditions being equal, the Government shall grant this company the preference over others for the transportation of its goods.

(15) The concession shall last six years from the date of the publication of the contract.

(16) The concession will lapse ipso facto if the company fails to fulfill the conditions named in article 11 within the terms specified; if it fails in the fulfillment of the contract in other ways, to which no penalty is attached, the Executive can apply in each case a fine not to exceed 1,000 pesos national money, the amount to be subtracted from the subsidy.

II.

Bids should set forth:

(1) The amount of the subsidy for which the company will undertake to perform the service, in strict accordance with the foregoing conditions.

(2) The charges for transportation, in accordance with the itinerary attached,* for each of the following classes: Cabin passage, steerage passage, packages; grain, hay, and like agricultural products; cattle; wool, hides, and similar products; wood, minerals, and materials for construction; general merchandise, which may not be included in any of the above classes.

III.

Bids should be made to the under secretary of the Ministry of Agriculture, in sealed envelopes and on stamped paper, on the 1st of August, 1899, at 2 o'clock in the afternoon, accompanied by a certificate of deposit in the National Bank of the amount of 20,000 pesos in national money or public bonds, payable to the order of the Ministry of Agriculture. Money accompanying bids which are not accepted will at once be returned. The deposit accompanying the bid which is accepted will be held as a guaranty until the service is begun as stipulated, and will be lost by the company if it is not begun within the period specified in article 11, without interfering with the lapse of the concession. The Executive has the right not to accept any of the bids. The accepted bid, it is understood, must be referred by the Executive to Congress for its approval.

* Filed for reference in the Bureau of Foreign Commerce.

PROPOSED RAILROAD IN BRITISH HONDURAS.

During the past twenty years, several indefinite proposals have been made to this government and to the Colonial Office for the construction of a railway from Belize to the eastern frontier of Guatemala, where it would be practicable to open up the immense forests of the province of Peten; but none of the offers have been approved, for it was not shown that the promoters had sufficient capital or security for undertaking the work, nor has any concession been granted by Guatemala to extend the line into that Republic. Now, however, the quiet and persistent efforts of the governor of this colony, Sir David Wilson, are apparently leading to success, as the following dispatch from the British Secretary of State for the Colonies shows:

DOWNING STREET, *July 22, 1899.*

SIR: With reference to the dispatches noted in the margin, I have the honor to inform you that Mr. R. W. Perks, M. P., has submitted proposals for the construction and working of a railway in British Honduras, including a pier at Belize, and for the extension of the line to a place at or near La Libertad or Flores, in the Peten province of Guatemala.

(2) Mr. Perks has forwarded for my consideration a draft agreement to be entered into with respect to the proposed undertaking, a draft ordinance to authorize the construction of the railway in the colony and a pier at Belize extending from high-water mark into 19 feet of water, and a draft specification which would form the basis of the contract for construction and which shows the type of railway which it is proposed to construct. Those documents will require material modifications before they can in any event be accepted, and I will not, therefore, ask you to consider their details at this stage.

(3) The draft agreement submitted may be regarded as of a provisional character, for while it is laid down in it that the colonial government would not be bound by its terms unless the company undertakes to construct not only the pier at Belize and a railway from Belize to the frontier into Guatemala, it is also provided that the company would not be bound to construct the pier at Belize, nor the railway from Belize to the frontier, nor the proposed extension from the frontier into Guatemala, unless the concession to be obtained from the Guatemalan Government for the construction of the proposed railway into Guatemala is granted in such form as shall be satisfactory to the company. On this point, the company is to be the sole and absolute judge; but it will be incumbent on it, within the period of six months after any concession shall have been granted by the Guatemalan Government, to state whether, in the judgment of the company, such concession is in a satisfactory form and one which the company can accept. Mr. Perks has stated that the railway which the company would propose to build would be * * * of the type of the railways which have been constructed in the Argentine Republic, Mexico, and other American states.

(4) In consideration of the construction of the pier at Belize, the railway from Belize to western frontier of the colony, and the extended railway into Guatemala, Mr. Perks asks for a grant of £75,000 ($364,988), payable in five installments of £15,000 ($72,998) each, on each section of the railway of a given number of miles

being completed in such a way that it could be opened for traffic, and for a land grant of 200,000 acres, to be made in blocks of 40,000 acres as and when each of the sections of the railway is completed and ready to be opened for traffic.

It is stipulated that a free grant will be made to the company of all lands and foreshore required for the construction of the pier and railway in British Honduras, so far as any such lands and foreshore, through which the proposed railway and pier shall pass, are Crown lands, and that the colonial government shall take what steps may be necessary for the purpose of securing for the company the necessary legal permission to acquire land for the purposes of the works.

(5) It will be within your recollection that the legislative council recommended in 1895 that the money grant for such a railway as is now proposed should be £60,000 ($291,990) and the land grant 5,000 acres for every mile of railway constructed within the colony. Assuming that the length of the line from Belize to the frontier would be 72 miles, this recommendation would have entailed a land grant of 360,000 acres.

(6) I shall be glad if you will lay this dispatch before the legislative council, and invite them to favor me, as early as possible, with a general expression of their views on the present proposals. It must be clearly understood that the matter will require detailed consideration hereafter, that I reserve to myself the final decision, and that that decision will be based on the ascertained financial capacity of the promoters of this scheme to carry it out, and on receiving an assurance from the legislative council that by means of a readjusted land tax, by changes in the tariff, or in some other way, it will be prepared at the proper time to raise such additional revenue as will be required to meet the charges on the loan which it will be necessary to raise for the payment of the installments of the money grant as they fall due.

I have the honor, etc.,

J. CHAMBERLAIN.

Governor Sir D. WILSON, K. C. M. G.

The governor has urged that the question is one of vast importance to this colony, the only division of Central America where a railway does not exist. If constructed at an early date, there is the certainty that it will pay, and the prosperity of British Honduras will be assured.

On the 15th instant, this proposal of Mr. Perks was accepted by the legislative council, with the recommendation that if approved by Mr. Chamberlain the work should begin not later than February, 1900. While it will be noted that the plan may be modified by the Colonial Office, or even rejected if thought proper, it is apparent that it is favorably regarded. The only means of access to the interior of this colony consists of the numerous rivers and the bridle paths, for there are no roads for vehicles. If Guatemala permits the road to be built into Peten, there will be a large traffic from that district in mahogany and logwood, and fruit raising and agriculture would be developed in this colony, these industries now being confined to the coast.

While it is true that this proposal comes from English capitalists, there is little doubt that the entire equipment will be purchased in the United States; for the railways now in operation in Honduras,

Guatemala, and Costa Rica are equipped with America rolling stock and machinery, in the latter country even at the expense of discarding the foreign equipment found in use there.

When the Colonial Office has definitely decided whether this proposal of Mr. Perks shall be accepted, or if some other tender is offered and approved, I will advise the Department; but it is almost a certainty that any railway scheme will increase the trade of British Honduras both to and from the United States.

W. L. AVERY,
Consul.

BELIZE, *August 22, 1899.*

MONTEVIDEO PORT WORKS.*

The Department has received from Minister Finch and Consul Swalm, under dates of Montevideo, July 28 and August 1, 1899, respectively, text of the bills for the construction of the port of Montevideo which have been submitted to the Chambers. Mr. Swalm says:

According to information that I have been able to obtain from responsible parties, the bills will pass and be accepted by both the House and the Senate with very slight changes, or perhaps none at all. The more interesting points of these bills are:

(1) That the work of the port will be commenced shortly after the approval of these bills (they will pass, very likely, before the end of August).

(2) That $500,000 extra are allowed, outside of the regular appropriation, to make the port 7.5 meters (24.6 feet) deep in such places as will be needed for vessels of large tonnage.

(3) There will be constructed a careening dock 200 meters (656 feet) long, of proportionate breadth, and with 8 meters (26.25 feet) of water below zero on the level of the supporting beams, and therefore able to dock any vessel of the United States Navy.

(4) And (what more nearly concerns foreign trade) that 3 per cent additional, plus the 2½ per cent additional already existing, will be levied on all imports of merchandise, excepting only things free of duty, and 1 per cent additional on all dutiable exports; these conditions to take effect from January 1, 1900.

The Executive will be authorized to contract at home or abroad for the work, and to pay for the same a loan of £1,500,000 or £2,000,000 ($7,299,750 or $9,733,000) will be emitted, the bonds to be called "Montevideo port obligations;" bonds to bearer, bearing 6 per cent

* For previous reports, see CONSULAR REPORTS No. 228 (September, 1899), pp. 41, 176, and No. 229 (October, 1899), p. 261.

annual interest and 1 per cent annual accumulative amortization. The service of this debt will be covered by the above-named additional port duties, and will be payable in gold at Montevideo, London, or elsewhere, as will be decided by a special committee appointed for the object of surveying the works and dealing with the finances of the port.

The full technical reports and plans of the proposed improvement have been sent to the Department.*

The bills read, in substance:

BILL I.

Approval is hereby given to the definite plans for the port works of Montevideo, prepared by the engineer Señor A. Guérard, on the bases of the plan of Kümmer Guérard, and approved by the survey commission and by the Executive in virtue of the decree of December 14, 1896. The Executive, advised by the National Department of Engineers, with or without the assistance of such resident or foreign engineers as the Government may appoint, may introduce such modifications, not being of a radical nature, as may be advised by science, unforeseen necessity, economy, and experience. In regulating this law, the Executive, taking into account the law of resources (that given below), shall indicate the part or parts of the general plan to be constructed or contracted at present. The Executive is authorized to expend a maximum of $500,000 more on the estimates for dragging prepared by Señor Guérard, in order to increase to 7.5 meters or more the depth of water in certain sections of the proposed port. In addition to the works estimated, the construction of a large careening dock, at least 200 meters long, proportionate breadth, and 8 meters of water below zero on the level of the supporting beams, shall be authorized.

BILL II (RESOURCES).

Chapter I.—From January 1, 1900, importers and exporters shall pay an extraordinary additional duty of 3 per cent on imports and of 1 per cent on exports, on the official custom-house values, on all goods, except those free of duty by previous contract or special laws. This duty shall be called "additional duty for construction of the port of Montevideo." This duty shall be collected fortnightly (the conditions being the same as those already prevailing for the 2½ per cent additional duty).

Chapter II.—The Executive is authorized to contract at home or abroad, and to issue a loan, the bonds to be called "Montevideo port obligations," the product of which shall be applied to payment of the port works authorized in Bill I. The amount of this loan shall be fixed at $7,050,000 or $9,400,000,† equivalent to £1,500,000 or £2,000,000, represented by bonds to bearer bearing 6 per cent annual interest and 1 per cent annual accumulative amortization, the latter by tender when below par and by drawing when above. The service of interest and amortization to be paid quarterly, in gold, in Montevideo and London or elsewhere, as convenient. The above-named additional duty shall be expressly assigned to this service. On signing the contract of construction of the port, the Executive shall deliver the bonds representing the port obligations to the financial commission, to be deposited in a stated bank.

* These have been filed for reference in the Bureau of Foreign Commerce, where they can be examined by interested parties.

† The Uruguayan dollar equals 96.58 cents in United States currency, according to the computation in the bill.

Chapter III.—The Executive shall appoint a commission of five members, to be called "financial commission of the Montevideo port works," to take charge of all the financial operations related to the port works, with the attributes and faculties conferred by this law. This committee shall be renewable periodically, salaried (remuneration not yet fixed), membership to be incompatible with other salaried public office, and with a monthly allowance (not yet fixed) for office expenses and the necessary employees. The additional duty and port dues (when created) shall be paid daily to this commission, to be deposited in a stated bank. The commission shall render quarterly account to the Ministries of Foment and Finance of its operations, besides presenting a complete annual report of proceedings, and it shall pay in gold the certificates of work after they have been duly passed by the technical office, in the form to be hereafter determined. It shall be authorized to appoint in London or elsewhere, in accord with the Executive, a responsible bank or financial firm as financial agent for the negotiation and service of the loan and kindred operations; also to issue in Montevideo, London, or elsewhere all or part of the port obligations, or to pledge the same, as opportunity advises. It shall deliver in due time to the office of public credit or to a stated bank the sums necessary for the service of the bonds issued. It may invest any sums accumulated and not immediately required for payment of works, in consolidated debt, purchased in Montevideo or London, or in bank bills for terms not exceeding one year, depositing the same in a bank. It may sell by auction or tender, at convenient opportunity and with accord of the Executive, the lands reclaimed from the port. Subject to Executive approval, it may arrange for purchase, exchange, or expropriation of shore lands necessary for the port, to be charged to construction expenses.

Chapter IV.—The Executive is authorized to declare the expropriation of lands and properties, within the bay or adjoining coasts, necessary for the construction of the port or the extraction of materials for the same.

The Executive is authorized to contract for the construction of the port works, offering the same to public tender, solely to first-class, credited, and responsible commercial firms which have already executed similar important works. The Government reserves the right to appreciate the standing of the firms and to annul all tenders if those presented are contrary to public interests.

There shall be assigned exclusively to the construction of the works and to guarantee any contracts for the same:

(*a*) The above-named additional duty until the emission of the port obligations. After these begin to be issued, the additional duty shall guarantee absolutely and in the first place the said obligations, and any surplus after paying the service of the same shall be assigned to the construction and extension of the port and its annexes and to the formation of a service for the preservation of the works.

(*b*) The product of the port obligations.

(*c*) The dues imposed on vessels and merchandise using the works of the new port, after deducting the cost of preservation and working, it being understood that the Republic reserves the fullest right to fix the tariffs or to annul them entirely.

(*d*) Any fiscal port lands not utilized for its direct service, though these may be sold by auction when convenient, the product being applied to continuation of the port works.

(*e*) The net revenue of the State light-houses from (date not fixed) and of the private light-houses when they become State property, the State reserving the right to fix the tariffs.

In case of signing a contract for the general construction of the port works, the contractor shall deposit a guaranty of $200,000 in bonds of public debt, withdrawing the interest as it falls due and the principal after having executed works to the value of over $4,000,000. The financial commission may retain as a guaranty 10

per cent of the payment on work certificates, or a total of $100,000, to be returned to the contractor one year after the completion of the works.

In case of signing a contract for the general construction of the works, the Executive shall appoint a technical administrative office of high responsibility to direct and finance the works, issuing the monthly certificates in the form to be arranged. The Chambers shall decide the budget of this office.

In case of annulling the tenders presented as unsuitable, or in case of no offers being made, the Executive shall give account to the Chambers. The financial commission shall pay the works in gold as rapidly as possible after each month of work. When the work is done by contract, the payment shall be at the contract prices, but the technical administrative office may issue provisional certificates to two-thirds of the value, under certain restrictions, for material accumulated by the contractors.

SHIPMENTS TO CHILE.

The French Chamber of Commerce of Santiago de Chile has recently forwarded a communication to the chambers of commerce of France, which I translate below, as it will be of equal importance to Americans who have business relations with that country:

At present, the majority of French houses doing business with Chile insert the names of the real purchasers or consignees on the bills of lading. However natural this may seem, it is none the less dangerous.

It may happen that between the departure of the order and the arrival [of the goods] in Chile, the situation of the purchaser has materially changed. Then the bank or the agent charged to remit the documents, who may wish to prevent the delivery of the goods, is placed in an embarrassing situation, because the documents being in the name of the consignee or purchaser, either he or his assignee, if he has failed, has the right to seize the goods in the custom-house. If the bankrupt or his representative does not claim the goods, the customs officers will hold them, and the seller, to obtain possession of his property, must bring a suit for annulment of contract, which is far from easy and may readily become onerous.

To obviate all this, it is only necessary for the shipper to observe the following suggestions:

(1) If the bills of lading are remitted to the purchaser or consignee in exchange for the acceptance of a draft, the best plan is to draw them to the order of a bank, which indorses and changes them for the accepted drafts.

(2) If the immediate acceptance of the draft is not demanded, an understanding may be had with a bank by addressing the bill of lading to it and making use of its intermediary. That will cost a slight commission, but it is cheaper than to lose the goods.

If the bills of lading are to be remitted by an agent to the purchaser or consignee, it is wiser to send them at once to the agent.

In following these suggestions, shippers will avoid a great many unpleasant surprises and difficulties, as nothing will defeat, in case of bankruptcy, their possible rights to the goods shipped.

JOHN C. COVERT,
Consul.

LYONS, *August 8, 1899.*

VENEZUELAN CONSULAR FEES.

Consul Plumacher sends from Maracaibo, August 1, 1899, translation of the regulations covering fees levied by Venezuelan consuls, as follows:

CONSULAR FEES.

ARTICLE 62. Consuls shall charge for their services in accordance with the following tariff:

Service.	Charge.	
Visits.		
1. To a Venezuelan vessel, upon her arrival at a port under his jurisdiction:		
For tonnage less than 20 tons, no charges shall be made.	*Bolivars.*	
From 20 to 50 tons	5	$0.96
From 50 to 100 tons	10	1.93
From 100 to 200 tons	20	3.86
200 tons	30	5.79
Manifests of cargo.		
2. For certifying the manifest of a vessel:		
Not exceeding 20 tons	5	.96
From 20 to 100 tons	10	1.93
From 100 to 500 tons	20	3.86
For certifying the manifest of a vessel exceeding 500 tons, the charges shall be according to the number of invoices comprising same and as per following rules:		
If the manifest comprises more than 5 invoices	30	5.79
From 5 to 20 invoices	50	9.65
More than 20 invoices	100	19.30
Invoices.		
3. For certifying to an invoice whose value does not exceed 1,000 bolivars	10	1.93
From 1,000 to 4,000 bolivars ($193 to $772)	20	3.86
If it should exceed 4,000 bolivars, the amount of 5 bolivars shall be charged for every 2,000 bolivars or their fraction.		
The foregoing fee covers invoices having one mark; if they have more than one mark, an additional charge of 5 bolivars shall be made for every extra mark.		
Bills of lading.		
4. For certifying to bills of lading of any invoice	10	1.93
Bills of health.		
5. For issuing or visaing a bill of health to any vessel:		
Not exceeding 20 tons	5	.96
From 20 to 100 tons	10	1.93
From 100 to 500 tons	15	2.90
500 tons	30	5.79
Transshipments.		
6. For certifying to a transshipment in any port:		
Outside of the Antilles	10	1.93
In Antillian ports	20	3.86
Passports.		
7. For issuing or visaing a passport to Venezuelan citizens	5	.96
For visaing a passport to any foreigner	10	1.93
No charges shall be made to persons coming to establish themselves in the Republic, such as emigrants, or to members of Congress or national employees.		

Consular fees—Continued.

Service.	Charge.	
Miscellaneous.		
8. For being present at the time of granting a power of attorney and certifying to same	*Bolivars.* 50	$9.65
9. For legalizing the signature of a power of attorney granted outside of his office	20	3.86
10. For serving as witness on celebration of a contract and administering an oath	50	9.65
11. For legalizing the signatures to a certificate of birth, marriage, or death	10	1.93
12. For taking possession of the personal estate of any citizen who shall die within the limits of the consulate, settling according to law, and transmitting the balance due thereon, 5 per cent of the gross value of such estate.		
13. For receiving on deposit or performing any other act in regard to merchandise or estates which must be delivered over to the legitimate representative of the deceased before liquidation, 2½ and 5 per cent of the total amount of sale made.		
14 and 15. For receiving and delivering ship's papers, including consular certificate	10	1.93
16. For authentication of protest, declaration, deposition, or signature	10	1.93

ART. 63. Manifests must be presented in duplicate and certified as one.

ART. 64. A set of invoices is composed of three sheets. If the shippers require extra copies, they shall pay for same at the rate of 5 bolivars each.

According to instructions from the Treasury Department, consuls may demand from the ship masters or shippers their manifests in triplicate and invoices in quadruplicate, in order to preserve one copy in the archives of the office.

ART. 65. A set of bills of lading is composed of two sheets. A consul may certify up to five copies without extra charge, but if the shippers wish more than five copies, he will have the right to charge 5 bolivars for every extra copy.

ART. 66. A transshipment comprises a manifest and its special papers, which consuls shall forward from the port where they were issued, after being examined at the port where the transshipment of cargo was made, in accordance with instructions from the Treasury Department. If, through neglect of the consul, the manifest is not accompanied by its corresponding documents, the goods shall be considered as transshipped and fees shall be charged according to this tariff.

ART. 67. No fees shall be charged by consuls to Venezuelan citizens who wish to register in their offices.

ART. 68. Consuls must state at the foot of each document the amount of fees charged for same.

ART. 69. Consular fees shall be collected in gold at the exchange rate of the bolivar.

At any time, whatever may be the fluctuations of exchange, a bolivar shall be considered equal to 1 franc, 5 bolivars to $1, and 25 bolivars to £1.

ART. 70. No other fees or compensation shall be demanded by consuls from Venezuelans or foreigners for above-named services; but if other services should be required from the consul, the latter may charge for his work the fees fixed for public notaries when performing same.

ART. 71. Consular officers shall post this tariff in a conspicuous place in their offices.

CULTIVATION OF HENEQUEN IN VENEZUELA.

Consul Plumacher, of Maracaibo, under date of August 5, 1899, forwards copy of a recent contract for the cultivation of henequen, which is summarized as follows:

H. Pinanzo Lara binds himself to establish the cultivation of henequen in Venezuela and to exploit it with the most approved machinery. The National Government agrees to rent him the necessary land in each of the States Zulia, Falcon, and Lara at an annual rental of 10 bolivars ($1.93) per hectare (2.471 acres). The right to cultivate all other textile plants growing on said lands is conceded. The contractor binds himself to import the necessary foreign laborers, who are entitled to all the benefits given by the emigration law. He is allowed the free introduction of all machinery, tools, instruments, and seeds; 10 per cent of all seeds imported shall be given to the State Board of Agriculture for distribution. The enterprise is exempt from taxation, but the Government shall receive 5 per cent of the profits, to be paid annually, fiscal agents being appointed when necessary. This contract can be transferred to any person or company, with the approval of the National Government, but not to a foreign government. The contractor binds himself to introduce the necessary machinery, etc., within one year, counting from the day on which this contract shall be legally approved, with the option of a second year if necessary. Compliance with this agreement must be guaranteed by the deposit of 4,000 bolivars ($772) in any banking institution of Venezuela, within six months after the definite approval of the contract, said amount to be withdrawn as soon as the machinery is installed. Orders to facilitate the transportation of all textile plants shall be given to the different custom-houses. This contract shall not interfere with similar contracts previously made, or with persons actually occupying lands and engaged in the cultivation of textile plants. On the contrary, said persons, by paying a modest remuneration, are entitled to use the machinery established by the contractor. A new grant, with the same conditions, may be obtained at the expiration of this contract, provided the enterprise is developing and still requires aid.

GUATEMALAN DUTIES ON CATTLE AND TOBACCO.

Consul-General Beaupré, of Guatemala, under date of August 3, 1899, transmits copy of decrees concerning the importation of cattle and tobacco, as follows:

DECREE NO. 600.

The Constitutional President of the Republic of Guatemala decrees:

From this date the importation of cattle, whether over the frontiers or by the seaports, will be free from all duties or taxes.

Given at the Executive Palace in Guatemala the 29th day of July, 1899.

IMPORTATION OF TOBACCO.

NATIONAL PALACE,
Guatemala, July 28, 1899.

In view of the consultation with the collector of customs about equalizing the importation duties on leaf and manufactured tobacco with what is charged for the importation of other kinds of merchandise, the Constitutional President of the Republic decrees:

That for leaf or manufactured tobacco imported from the 1st of August next by the seaports there will be charged, in the respective custom-houses, the additional duties of 7 and 15 per cent over that imposed by the 8th article of the Executive decree No. 596 of the 9th of June ultimo; having to pay in gold the 10 per cent of the total of taxes and additional duties.

VEGETABLE IVORY IN ECUADOR.

In reply to inquiries by New York firms,* Consul-General De Leon writes from Guayaquil, July 29, 1899:

There are four ports in Ecuador exporting tagua (vegetable ivory), as follows: Guayaquil, which sent out in 1897 about 3,700 metric tons; Manta, 3,000 metric tons; Esmeraldas, 2,900 metric tons; and Bahia de Caraquez, 1,900 metric tons; total, 11,500 metric tons.

Germany imports over two-thirds of this total, very cheap rates being obtained from the Kosmos Line to Hamburg via the Straits of Magellan. The United States ranks next in importance, importing about one-sixth of the total. The balance goes to France and England.

In the Guayaquil market, the harvest comes in during the rainy season. From February to July, while the rivers are swollen, great rafts of balsa (a very light wood) are loaded with the article and floated down from the forests on the head waters. Shortly after the rainy season has ended, the stock is all exported from this market, and no more can be had until the following harvest.

The prices in the Guayaquil market of 1899 are as follows, per 100 pounds:

Ivory nuts:	Sucres.	
Unpeeled	1.40 to 1.50	=$0.62 to $0.664
Peeled	2.40 to 2.60	= 1.06 to 1.15
Free on board—		
Unsacked, add about	.60	= .265
Sacked, add about	.75	= .33

*To whom Advance Sheets have been sent.

Merchants prefer to quote f. o. b. prices, but the following is the list of charges on tagua bought for account, per 100 pounds:

	Sucres.	Cents.
Landing	0.10	=4
Lighterage	.04	=1.7
Storage	.02	=0.85
Embarking bulk	.10	=4
Exportation tax	.17	=7.5

Insurance, one-half of 1 per cent.
Commission, 4 per cent.

If the tagua is sacked, the charges are, per 100 pounds:

	Sucres.	Cents.
Sacks	0.15	=6.6
Sacking	.05	=2.2
Sack marking	.005	=0.22
Embarking, sacked (6 centavos less than in bulk)	.04	=1.7

Freight rates are as follows: To New York, via Panama, long ton, $16 gold; to New York, via Straits of Magellan, long ton, 35s. ($8.52); to Hamburg, via Straits of Magellan, metric ton, 32.5s. ($7.91); to Liverpool, via Straits of Magellan, long ton, 42s. ($10.22).

The palm which bears this nut abounds in the forests of the Pacific slope of Ecuador, and is not extensively worked on account of the low prices which it commands. A good description of the tree as it exists here can be found in the Encyclopedia Britannica.

Interested parties may communicate with the following exporters in Ecuador: Messrs. Servat & Dumarest, Esmeraldas; Messrs. Alejandro Santos & Co., Bahia de Caraquez; Messrs. Norverto Osa & Co., Manta; Messrs. Martin Reinberg & Co., Guayaquil; Mr. J. S. Bruno, Guayaquil; Messrs. Lopez & Guzman, Guayaquil; and E. Pavia (agent, Flint, Eddy & Co.), Guayaquil.

HURRICANE IN GUADELOUPE.

Consul Aymé, of Guadeloupe, under date of August 10, 1899, sends the following details in regard to the damage caused by the hurricane of August 7 in that island and port:

All telegraph and telephone lines are down; the roofs of the great warehouses have been carried off, and the contents ruined; two small steamers anchored in the bay went to the bottom, and two others sank in shallow water; lighters which were engaged in transporting cargo from steamers in port were sunk; boxes, barrels, and cases are strewn along the quays, mingled with the wreckage of small

boats, sloops, etc. The western part of the island suffered very little; but on the east, the towns of Gosier, Port Louis, Anse, Bertrand, St. Francois, and the Moule were nearly wiped out of existence. Forty deaths and over two hundred seriously wounded are reported. Desivade Island is said to have but five houses left standing. Even more serious is the damage to the crops. The coffee and cacao plantations lost 80 per cent of their products; breadfruit, mangoes, bananas, apricots, cocoanuts, sapodillas, and alligator pears form an important part of the food of these people, especially in the country. The season for these fruits had just begun. The crop is a total loss, and the injury to vines, shrubs, and roots is also serious. Famine threatens the island. There is no Puerto Rican beef to be had, and very little native meat. Many fishing boats were lost. The price of provisions is rising. The loss of property in the city amounts to at least $5,000,000.

This is the first hurricane which has swept this island for nearly one hundred years; and coming as it does after the earthquake of 1897, the fires of 1898 and 1899, and while the island is passing through a serious financial crisis, it will, I think, force the colony to appeal to the outside world for assistance.

MISREPRESENTATIONS REGARDING JAMAICA.*

Under date of July 31, 1899, Vice-Consul Springer, of Kingston, transmits the following communication from the colonial secretary concerning erroneous statements which, he asserts, appear from time to time in American newspapers in regard to Jamaica:

COLONIAL SECRETARY EVANS TO VICE-CONSUL SPRINGER.

COLONIAL SECRETARY'S OFFICE,
Kingston, Jamaica, July 28, 1899.

SIR: I am instructed by the governor to inform you that his excellency's attention has been drawn to the inaccurate and often entirely false statements which appear from time to time in the American newspapers in regard to the condition of this island or to incidents which occur in the colony.

While the fact that there is persistent misrepresentation is in itself much to be regretted, it would not call for intervention on the part of his excellency were it not that much of the misrepresentation is of such a character as tends gravely to affect the interests of the island and its reputation abroad.

The extract from an American newspaper quoted in the inclosed cutting affords a fair example of the kind of misrepresentation to which his excellency refers. His excellency can not say if the correspondent or agent to whom the local newspaper from which the cutting is taken ascribes it is really the author of the communication, but it does certainly appear that it has been furnished by a newspaper

*See "Newspaper reports regarding Jamaica," *post* p. 503.

agent here, and his excellency feels sure you will agree that the statements are not only untrue, but that they are calculated to do much mischief to the colony.

If there is any way by which you can assist this government in putting a stop to these continued misrepresentations, or at least in counteracting the unfavorable impression they are so apt to make upon the American public, his excellency would be grateful for the exercise of your good offices in that direction.

I have, etc.,

FRED. EVANS,
Colonial Secretary.

EXTRACT REFERRED TO IN COLONIAL SECRETARY'S COMMUNICATION.

[From the Kingston Gleaner of July 19.]

The following appears in the American papers; it is common property and is therefore probably the work of the Associated Press agent here:

Famine in Jamaica.—Epidemic of typho-malarial fever adds to miseries caused by the drought in south of island.

KINGSTON, JAMAICA, *July 8.*

The severe drought in southern Jamaica is causing widespread distress and alarm.

The coffee, orange, and corn crops are almost destroyed, and the destruction of the natives' provision crops is causing a famine.

The rural population is fleeing from their homesteads, seeking relief in town centers.

The trouble is augmented by an outbreak of typho-malarial fever through using putrid water.

EMERALDS IN COLOMBIA.

Until very recently, emeralds were a drug in the market of Bogotá. One who desired to buy them had only to wait and have them brought to him. The famous Muzo mine, which has produced emeralds of great value and in large quantities, lies near Bogotá, and the people of this city have long been familiar with its products. This mine is operated by a French company, which insists that for the past year or so it has found almost no emeralds. However, from this source or from others crude emeralds have continued to come into Bogotá. Of the cut stones, set and unset, there has been an abundance in the market. Hard times have compelled many persons to offer for sale their highly prized heirlooms, and these have been obtainable as a rule at very low prices.

About ten days ago, an emerald craze seized upon Bogotá. The jewelry stores and all other establishments where emeralds are dealt in were besieged by persons who wished to buy and by others who wished to sell; and for the same reason, men and women crowded the streets, standing in the roadway as well as on the sidewalk, some displaying their emeralds and others their money. A jewelry

establishment located on the most prominent corner in Bogotá was compelled to ask the police to drive the crowd away.

As the news spread outside of Bogotá, emerald owners began to rush in. This swelled the throng and sent the fever up several degrees. Sales were made right and left at prices hitherto unheard of in this market. Persons who had not thought of selling, tempted by the wild rush to buy, brought out their emeralds and began trading. Nobody could explain the real cause of the excitement, and many are now beginning to realize that it was without real cause. About five days ago, the fever reached its height, and has since been declining. While it lasted emeralds sold, on a gold basis, at about three times their value in this market just before the excitement began. It is estimated that up to this time, about 4,000,000 pesos have changed hands as the result of the furor.

The crowd has almost disappeared from the streets, and many buyers who went in on the flood tide find themselves with emeralds that will not bring the price they paid for them. Others, also inexperienced, have more or less excellent imitations as souvenirs of this extraordinary movement. It does not appear that the expert dealers have bought so extravagantly as the general public, and yet it is believed that some of these have far overreached themselves.

The only approach to an explanation for this craze is that a Bogotá dealer who went to Paris recently, on his return to this city began to buy emeralds at higher prices than had been ruling in the market. This seems to have started it. Some of the experts say that this dealer drew out of the market long before prices reached their height, and that he did so because emeralds were selling in Bogotá for more than they would bring in Europe.

CHAS. BURDETT HART,
Minister.

BOGOTÁ, *July 21, 1899.*

MINING AND AGRICULTURE IN THE YUKON TERRITORY.

Consul McCook, of Dawson City, under date of August 20, 1899, writes:

MINING.

The mining outlook for this country is improving, owing to the use of machinery and the appearance upon the field of the capitalist. Thawing machines coming in are speedily bought. I am surprised that no American machinists have come here with material to make

these machines, as it would have been a paying venture. In all mining camps in Alaska, as well as in the Yukon territory, these machines will have to be put in operation, as this is the most economical way to work the ground. Claims that would not pay by the ordinary method of pick and shovel, in consequence of the high rate of wages and living, will yield profits by this method. Dirt which was formerly considered not worth saving and shoveling into the sluice boxes will yield large returns when handled in this manner.*

REFRIGERATING MACHINERY, AGRICULTURE, ETC.

The steamer *Lotta Talbot*, with refrigerating machinery, that left Seattle in June and supplied fresh meat at St. Michaels and various ports along the Yukon, has arrived here with about 90 tons of dressed meats, butter, eggs, lard, etc. The company's intention is to establish refrigerating plants at the different large posts along the Yukon, and to supply St. Michaels and Cape Nome next year, while navigation remains open. Stock raising along the Yukon should be very profitable. The building of sheds for winter shelter would be the greatest expense. To raise provender is an easy matter. The markets in Dawson are daily supplied with radishes, lettuce, cabbage, turnips, carrots, pease, beans, etc., grown within 2 miles of the city. Flowers of nearly all varieties are cultivated on a farm a mile or two from the city; there may be seen more than an acre of beautiful flowers, blooming as if they were in a southern region.

May, June, July, and August are practically free from frost.

QUARRIES.

Bricks are made about 6 miles up the Yukon, and sell at $80 to $125 a thousand, according to quality. There is a marble quarry close to Dawson, from which trimmings for doors and windows can be obtained. Porphyry is also found.

TELEGRAPH AND RAILWAY.

By the 1st of October, it is expected that the telegraph line to Dawson from Skagway will be completed, so that anything of importance can be communicated from the States or Canada in about three days. I understand the railroad is being pushed farther than Bennett, and should be to White Horse by next year. The lower river is fast losing ground in the carrying line. Very few passengers go out that way since the stampede to Cape Nome ceased. The upper-river boats have all the freight they can handle.

* Under date of August 17, 1899, Consul McCook gives a detailed statement of the gold shipments from Dawson from June 1 to August 9, as per manifests of steamers. The total is $4,971,578. It is estimated, adds the consul, that fully one-third of the gold mined goes out in small quantities, carried by individuals. Of this, no account is kept.

MINING IN ALASKA.

There is quite a stir in mining circles about the good showing in the Forty-Mile district in Alaska. The Alaska Commercial Company is to build a store at the boundary, where miners can be supplied. I understand that arrangements have also been made with the customs officials whereby goods can be shipped through in bond to Eagle City or Forty Mile. Jack Wade Creek will be worked this winter, in addition to many others. The ground there has only been scratched. Good mining property can be obtained at very low rates. Gold has recently been found back of Nulato, near the Koyukuk River, where it empties into the Yukon. This only adds to the evidences that Alaska will be a great gold-producing country in the near future. In a few years, when modern conveniences are brought in, one can live as comfortably here as in many of the Northern States.

CANADIAN MINING PROJECT.

United States capital and enterprise are developing one of the largest industrial movements ever undertaken in Canada, representing a capital of $20,000,000. The organization is known as the Dominion Iron and Steel Company, and is projected by H. M. Whitney, of Boston. The new company is formed by the amalgamation of the Cape Breton Coal Company and the Ferrona Steel Company, of New Glasgow, Nova Scotia, and has under its control a vast field of hematite ore, all the available Cape Breton coal mines, and all the Sydney limestone quarries.

The presence of iron on Bell Island, Newfoundland, was first discovered in 1815, but it was only in 1892 that it was known to be of commercial value. The Ferrona Steel Company bought the tract in 1893 for $120,000. Last spring, it was sold to the Whitney syndicate for $1,000,000. Development of the ore field has led to such valuable discoveries that the company has been reorganized on a much larger basis than was at first contemplated, and the industry will be rapidly developed into one of the largest iron and steel enterprises in the world. The present output is 2,500 tons of ore a day. The plan outlined by the syndicate provides for an output of 150,000 tons of ore a month and its conversion into iron and steel ready for shipment.

This mine is unique in its way; there is no other like it, it is said, in the world. It is an open bed or deposit of iron ore, 300 feet wide and some 3 miles long, and all the labor required is to blast it

with dynamite and shovel it into the cars. The natural formation of the deposit is, however, its chief claim to note. It is made up of innumerable rectangular blocks of ore, set together in almost horizontal strata, like bricks in a wall or tiles in a pavement, and cemented into a solid mass by some gigantic pressure exerted countless ages ago. The bed is covered with a deposit of soil some 10 feet thick; and when this is stripped off, the horizontal face of the section resembles nothing so much as a level tiled floor, the lines of junction of the countless pieces composing it being distinctly visible. A lateral view of the section shows the different strata piled on top of each other with mathematical precision. Steam drills work holes downwards into the floor; dynamite cartridges are bedded therein and exploded by electricity, and this force rends asunder large sections of the bed, the shock serving also to dismember the mass into its host of component cubes, or blocks. These are shoveled by the workmen into the waiting cars, which are presently sent on the first stage of their journey to the smelting works.

Careful estimates place the amount of ore already available at 35,000,000 tons. The cost of mining, up to date, has averaged only 25 cents a ton. The gravity system is used throughout, and the ore is carried from a great reservoir on the cliff into the steamer hold for one-fifth of a cent a ton. There is but one other deposit of hematite ore in the world like this Newfoundland field, and it is in Alabama. It is an inland deposit, however, with no water transportation.

In addition to the natural advantages, the Dominion Government grants a bounty of $2 a ton on iron smelted in Canada, and $5 a ton on steel. This bounty was granted to encourage iron and steel production, and every effort is being made by the new company to secure the benefits of the law at the earliest possible date. When it becomes necessary for the Dominion Government to pay out millions of dollars annually to encourage iron and steel production, there will undoubtedly be a movement to curtail or abolish the bounty.

Four hundred coke ovens, ten open-hearth steel furnaces, and extensive rolling mills are in course of construction, work being pushed night and day, under the supervision of Julian Kennedy, of Pittsburg, Pa., a well-known constructing engineer. The firm of Riter, Connolly & Co., also of Pittsburg, has secured the contract for furnishing the furnaces and ovens, the value of which will aggregate $3,000,000. President Whitney expects to have two blast furnaces completed in eighteen months and two others a few months later. It will require three years to complete the equipment of the plant. The total expenditure on equipment will be about $9,000,000.

In the meantime, the coal mines and limestone quarries will be put in working order.

The market for the product will he found almost entirely in England and continental Europe. Labor is cheap, the ore is easily mined, the bounty is large, coal and limestone are in close proximity, railroad freights are eliminated, and the source of supply is 3,500 miles nearer to England than is the Alabama field. With the growing scarcity of ore in Europe and the increasing demand for iron and steel, Mr. Whitney feels confident that prices will not show much decline in the future, and a steady market for all the iron and steel they can make is assured for a long period to come. Once operations are set on foot at Sydney, none of the crude ore will be sold, as it is the aim of the syndicate to supply the British market with pig iron, rolled plates, and steel ingots to the fullest capacity of the works.

The ultimate aim of the syndicate is to build great steel steamships and supply steel for large structural operations. The balance of the $20,000,000 capital will be used for this purpose. Being close to the great highway that ocean traffic follows between the two continents, there are peculiar advantages in such a location as Newfoundland for a first-class ship building and repair plant

HARLAN W. BRUSH,

NIAGARA FALLS, *September 11, 1899.* *Consul.*

MICA IN ONTARIO.

There is great activity in the mica mining of this district. A large section of the country between Kingston and Ottawa is rich in mineral wealth—gold, iron, and mica.

The mica mines are the only ones which at present seem to be paying, and there is a fair degree of certainty that they will continue profitable. The following mica mines are now being worked in the vicinity of Kingston: Stoness mica mines, Kingston; Bear Lake mine, Kingston; Dr. E. H. Smythe mine, Kingston; Webster Company mine, Sydenham; Fred Foxton mine, Sydenham; R. W. Freeman mine, Sydenham; Tetts Brothers mine, Tetts Mills. The output is controlled by Webster & Co., an American company.

The products of the various mines are concentrated at Ottawa and shipped to the United States; consequently, the quantity and value are unknown to this office. From what I can learn, there is an abundance of mica of all qualities, from superior white to the lowest grades of colored mica.

From those who are in positions which entitle their opinions to respect, I learn that there are as many as one hundred mica-mining prospects in the vicinity of this city. Almost every farmer in the back townships has a mining prospect of iron, gold, copper, or mica on his farm.

M. H. TWITCHELL,

KINGSTON, *August 19, 1899.* *Consul.*

NEW RAILROAD AND MINING ENTERPRISE IN ONTARIO.

The Algoma Central Railway, which is one of the roads granted a subsidy of $3,200 per mile by the Canadian Government, is to run from Sault Ste. Marie, Ontario, in a northerly direction to Dalton, on the Canadian Pacific Railway, a distance of about 160 miles, with a branch running from Dalton southwesterly about 40 miles to Michipicoton, a harbor on Lake Superior.

The Lake Superior Power Company owns the franchise, and I am informed that the branch running from Lake Superior to Dalton on the main line of the Canadian Pacific Railway is under construction, and that it will be completed as far as the "Helen" hematite-iron mines, about 12 miles, by the 1st of November, 1899, and the balance of the branch will be completed next summer.

It is understood that the Ontario government has promised an additional land bonus of 6,400 acres per mile.

The country through which this road runs shows outcroppings of minerals, principally iron and copper, with some gold, and it is expected that valuable mines will be developed.

The ore of the Helen mine is brown hematite iron, and is claimed to be very high grade. The company has done considerable development work, and claims that by the time the road is finished to the mines this fall it will be able to ship 1,000 tons of ore per day. It is constructing large docks at Michipicoton for loading the ore into vessels.

The same company also informs me that it has completed arrangements for building large smelting works here, for treating all kinds of ores (said to be by a new electrical process), to be completed within a year. The stock of this company is owned principally by citizens of the United States.

GEO. W. SHOTTS,

SAULT STE. MARIE, *September 7, 1899.* *Commercial Agent.*

PEAT IN ONTARIO.

The most serious problem that confronts the Canadian people of the future is material for fuel. The gigantic lumber industries and the great annual forest fires have so denuded the timber area of Ontario that the people are thoroughly alarmed about the future fuel supply. Hard wood for fuel is now worth from $6 to $8 a cord and soft from $3 to $5; while coal, which is all imported from the United States, costs $6 a ton. The item of fuel is therefore one of the heaviest expenses to every housekeeper in this latitude of long and severe winters. An ordinary residence will consume not less than $100 worth of fuel in a year. It has been well known for years that there were extensive beds of peat bogs in Canada, and particularly in the Province of Ontario. An effort has been made during the past six months to utilize this product of nature. In Ireland, Wales, Holland, and Bavaria peat has long been the chief fuel used by the poor. The recent invention of machinery, by means of which vast areas of hitherto unused bogs can be converted into marketable peat, has opened up a new Canadian industry.

The origin of peat bogs is well understood. They occur in low situations or where some natural or artificial obstacle impedes the drainage. Abundant moisture favors the growth of a low order of plants, such as the *Sphagnum* mosses. This plant is noted for its absorption of water. Its structure is that of reservoirs in successive layers, which are kept filled by capillary attraction, even when the plant itself is above water level. The same properties of the moss tend also to its decay. It requires a constant supply of moisture, yet it is continually pumping up to the surface of its tufts the water in which it stands, thus promoting evaporation; while at the same time, by regularly decaying at the roots, it deposits the detritus which adds to the solid contents of the bog. This process goes on until the bog is raised above the level of the surface waters, when *Sphagnum* vegetation ceases.

The best authorities say that there are 100,000 acres of this undeveloped peat bog in Ontario, principally in the counties of Perth, Welland, and Essex. The largest area lies in the county of Perth, 8 miles north of the city of Stratford, on the Grand Trunk Railroad that extends from Port Dover to Owen Sound. Here is a swamp of 40,000 acres with a depth of peat bog that varies from a foot to 20 feet. About a year ago, the Canadian Peat Fuel Company was organized, and early in the summer active operations to put the fuel upon the market began.

The process of manufacturing it is as follows: The peat is cut and air dried, after which it is pulverized by being passed through a picker, and automatically deposited in a hopper which feeds a steel tube, about 2 inches in diameter and 15 inches long. The pulverized peat is forced through this tube by pressure, and formed into cylindrical blocks 3 inches in length and almost equal in density to anthracite coal. The fuel is nonfriable and weatherproof by reason of its solidity and the extreme glaze imparted to it by frictional contact with forming dies. The inherent moisture of the peat is reduced to 12 per cent of the moss. In weight, it compares with coal as follows: Eighty-three pounds per cubic foot of peat equals 73 pounds of bituminous or 93 pounds of anthracite coal.

It is claimed for peat that it is superior to coal in its absolute freedom from sulphur and the absence of smoke, soot, dust, and clinkers during consumption. In a great measure, this solves the problem of furnishing a cheap, clean, uniform, and reliable fuel for all domestic purposes, as it is equally serviceable for grates, stoves, cooking ranges, and furnaces, giving a long, bright flame and intense heat almost from the moment of ignition. It has been tested in locomotives with excellent results, showing that the thermal value of 100 pounds of peat is equal to 95.15 pounds of coal. It was also tried at the power house of the Metropolitan Street Railway, Toronto, and gave great satisfaction. The heat produced was much greater than that of coal, but it was 8 per cent deficient in lasting power. It requires but little draft, and burns best in a shallow fire box.

The machinery used in manufacturing peat fuel is not expensive and requires but little attention when in operation. The company claims that when these works are fairly started, it can produce compressed-peat fuel for 60 cents a ton. If these claims can be fulfilled, it will only be a few years until artificial heat will become so cheap that the struggling thousands of poor people will be immensely benefited, while at the same time it will also reduce the item of fuel for transportation and manufacturing companies to a minimum.

A. G. SEYFERT,
Consul.

STRATFORD, *August 17, 1899.*

NOTES.

South African Trade Notes.—Consul-General Stowe writes from Cape Town, August 25, 1899:

I am pleased to note that during the ten months ended April 30, 1899, the increased importation of boots and shoes into South Africa from the United States was £645 ($3,138.89). For the same period, the imports of all kinds of goods from the United States into Natal increased £198,520 ($966,097.58), while from Great Britain and all her dependencies the increase was only £139,522 ($678,983.81).

A box-making factory has been started on quite a large scale in Natal, four machines having been imported from England.

The Natal Gazette shows estimates for the expenditure of £218,406 ($1,162,872.80) for building new lines of railway and cars. A sum of £73,000 ($355,254.50) was named for locomotives and £3,000 ($14,599.50) for new furniture for government use. It is also in contemplation to build cold-storage plants at the principal railway depots. Demands are noted for piping for waterworks.

Gold Output of Transvaal, July, 1899.—Consul Macrum sends from Pretoria, September 4, 1899, the statement of the chamber of mines of the South African Republic, showing the gold production in July, 1899. It appears that there were 478,493 ounces of bullion extracted, equivalent in fine gold to 409,127 ounces, of a total value of £1,711,447 ($8,328,757). The Witwatersrand district furnished 456,747 ounces of the total bullion. The following tables give summaries of the total yield by districts, and of that of Witwatersrand, according to source:

General summary.

District.	Quantity.		Value.	
	Ounces.	*Dwts.*		
Witwatersrand	456,474	1	£1,633,199	$7,947,963
Lydenburg	11,124	10	38,683	188,251
De Kaap	8,091	9	30,660	149,207
Klerksdorp	2,331	14	7,255	35,306
Banks from other districts	471	16	1,650	8,030
Total	478,493	10	1,711,447	8,328,757

Witwatersrand summary.

From—	Quantity.		Value.	
	Ounces.	*Dwts.*		
Mill	290,029	14	£1,067,383	$5,194,419
Concentrates, etc	11,543	0	39,948	194,407
Tailings	144,745	15	490,535	2,387,189
Slimes	9,724	1	33,833	164,648
Banks	431	11	1,500	7,300
Total	456,474	1	1,633,199	7,947,963

German Interests in the Transvaal.—Consul Monaghan writes from Chemnitz, September 12, 1899:

This Empire's industrial interests in the Transvaal are great. In the ten years 1889 to 1898, Germany imported 3,000,000 marks' ($714,000) worth from the Transvaal, and exported 60,000,000 marks ($14,280,000). The chief articles of export for 1898 and 1897 were:

Articles.	1898.	1897.
Cyankalium.....double hundreds (220 pounds)...	8,756	6,137
Glycerin (cleaned).....do.....	15,567	17,121
Igniting matches.....do.....	4,176	3,721
Rough ironware.....do.....	10,887	10,320
Fine ironware.....do.....	884	790
Railroad parts, plates, sleepers (iron), etc.....do.....	3,485	8,198
Rails, iron.....do.....	4,869	41,653
Railroad axles, wheels.....do.....	1,205	22,276
Cast-iron machines.....do.....	7,953	8,923
Wrought-iron machines.....do.....	4,004	2,385
Locomotives, locomobiles.....do.....	2,219	16,171
Railroad wagons.....number...	647	734
Cotton cloths.....double hundreds (220 pounds)...	485	515
Woolen clothes.....do.....	95	85
Cement.....do.....	53,632	28,655
Rough tables, etc.....do.....	1,333	2,887
Pianos.....do.....	425	440

Fruit Trees in South Africa.—Consul-General Stowe, of Cape Town, under date of August 23, 1899, says:

While grafted American vines are appreciated and well known here, the government having offered premiums on such stock, the fruit and ornamental trees and shrubs of the United States have not been introduced. A representative of a United States nursery has been here eight weeks, and he assures me that he has sold more in that period than he could have sold in the United States in twenty-four weeks. He has only been canvassing this city and suburbs and is now compelled to leave for the United States. Fruit of nearly all varieties can be cultivated here, but growers must be educated.

As there are no frosts, the insects and their larvæ are not killed as in countries where frost occurs; consequently, a large number of trees die. This can be prevented if the people would use the same care and adopt the methods and appliances that have become so necessary and so efficient in the United States.

This brings me to the suggestion that the chemical preparations and spraying pumps used in the United States could be introduced into this country with profit. No agent must come here expecting to stay only a few weeks; he must come to instruct and to prove the advantages of his goods. American fruit and ornamental trees, shrubs, etc., will find a market when properly introduced.

Flour in Madagascar.—In reply to a New York correspondent,* Consul Gibbs writes from Tamatave, August 3, 1899:

There are no importers of American flour at this place at present. Most of the flour used here comes from France, and considerable is also imported from Bombay by Indian merchants. Australasian flour is likewise imported. Last year, some American flour came here via Cape Town, South Africa, but the preferential duties are such now that other countries can not compete with French flour.

The largest dealers in flour are French firms who supply the colonial government for the use of the soldiers in Madagascar, and it is specially stipulated in their contract that they shall furnish only French flour.

Correspondence on the subject may be had with the following firms at Tamatave: Messrs. Dadabhoy & Co., Messrs. Procter Brothers, Mr. Leon David, Mr. I. Dupuy, and Mr. E. Giguel.

Correspondence with Messrs. David, Dupuy, and Giguel should be conducted in the French language. Messrs. Dadabhoy & Co. have a branch office in the Coffee Exchange, New York.

Silk and Tea in China.—Consul-General Goodnow, of Shanghai, on August 24, 1899, sends copy of an imperial decree ordering the local authorities to consider what should be done to improve the quality of silks and tea. The consul-general adds:

In 1897, a large proportion of Pingsuey tea could not pass United States inspection. I wrote to the local authorities in the regions producing those teas, and these authorities issued proclamations calling attention to the necessity of more careful preparation of teas. Last

* To whom Advance Sheets have been sent.

year, very few shipments were rejected. A little attention by the local Chinese authorities will undoubtedly result in the proper preparation of the silk and tea.

The decree reads:

THE NECESSITY OF INTRODUCING IMPROVEMENTS IN TRADE.

The board of punishments has handed to us a memorial stating that the export of silk and tea from China has not equaled of late the value of imports from foreign countries, in consequence of which the country is annually drained of large amounts for which there is no return. Of late, the manufacture both of silk and tea has deteriorated, resulting in a reduction of the export of these two commodities. It is vitally necessary that these manufactures should be improved at once, in order to increase the demand for them in foreign countries, and the memorial recommends the establishment without delay of schools and workshops to teach Chinese the science of making silk and tea and other things according to Western methods, which are far superior to the antiquated methods of China. The viceroys and governors of treaty ports and of provinces which produce silk and tea for export are hereby commanded to consider without delay what should be done in the matter and report to us.

T'ung Oil in China.—Consul-General Goodnow transmits from Shanghai, August 25, 1899, a letter from Mr. Stephen P. Barchet, interpreter for the consulate-general, to a Chicago firm,* from which the following is taken:

T'ung oil is extracted from the seed of the paint tree (*Dryandra cordasa*), which is extensively cultivated in the Yangtze Valley, and also in Chekiang Province. This interesting tree would probably grow in the Southern States and in California and could be cultivated with profit. The seeds of the paint tree are poisonous, and the oil is used occasionally for poisoning rats; also to produce vomiting in would-be opium suicides, though for the latter purpose it is neither as safe nor as effective as zinc sulphate or the stomach pump. The chief use of t'ung oil is as a standard paint, and as such it is in great demand by the natives. When boiled, it makes one of the best drying oils; it is also extensively used in varnishing with the famous Ningpo varnish "t'si"—*i. e.*, the dried sap of the varnish tree (*Rhus vernicifera*), a good coating of which will stand considerable heat without leaving a mark and will last for years. The various shades for coloring are produced by animal, vegetable, and mineral substances. Pig's blood is the favorite for a first coating in varnishing. To give body and luster to paint, they mix with the oil finely powdered galena and other ores. Current wholesale quotations for t'ung oil are 8 taels per picul (133 pounds), or 5 to 6 cents (gold) per catty (1⅓ pounds). Freight charges to San Francisco are just now $2.50 in United States currency per ton, but oils have to be shipped as deck packages, for which fancy prices are paid—$6 gold per ton to San Francisco.

* To whom the original has been sent.

American Piece Goods in China.—Consul Fowler sends from Chefoo, July 13, 1899, a statement of imports of piece goods from the United States into China in the first six months of 1899, as follows: Sheetings, 1,491,752 pieces; drills, 521,972 pieces. The estimated imports for the calendar year 1899, compared with those of five years ago, are:

Year.	Sheetings.	Drills.
	Pieces.	*Pieces.*
1899	4,056,000	1,977,500
1894	1,007,840	611,727
Increase	3,048,160	1,365,773

Ninety per cent of the imports, adds the consul, go to Chefoo, Tientsin, and Niuchwang.

Soda Nitrate in Chile.—In a letter to a Massachusetts firm,* Consul Merriam, of Iquique, under date of August 8, 1899, writes:

The cost of production of nitrate varies greatly in the different establishments, depending upon the abundance and quality of the "caliche" or crude nitrate, distance from port, price of coal, etc. Moreover, the manufacturers are not disposed to declare the cost of production, considering this to be one of the secrets of the trade. Railroad-transportation rates to the coast are 6d. (12 cents) per Spanish quintal of 100 pounds for 40 miles or more, with a proportionate reduction for distances under 40 miles. On and after January 1, 1900, the rate will be 4½d. (9 cents). The average rate of ocean freights for nitrate from January to June of the present year has been 27s. 2d. ($6.61) to Europe and the United States. I give below figures showing the exportation of nitrate of soda from the ports of Iquique, Pisagua, Junin, Calesa, Buena, Antofagasta, Trocopilla, and Taltal:

	Tons.†
1896	1,091,681
1897	1,063,349
1898	1,272,121
First 6 months of 1899	557,327

Foreign Loan in Colombia.—Under date of August 25, 1899, Minister Hart sends the following from Bogotá:

By executive decree of the 18th instant just published, the Colombian Government announces that in order to change the paper money of the country into silver money it will seek a foreign loan of £3,000,000 ($14,599,500). As a guaranty for this loan, the Government offers

* The original has been forwarded.

† 2,240 pounds.

to pledge the rental of the emerald mines of Muzo and Coscuez, the product of the match monoply, the annual sums due from the Panama Railroad Company to the Republic, and the interest of the Republic in the Panama Canal. By another decree of the same date, the re-establishment of a national bank is authorized, the shares of the bank to be offered to the public. The Government has other resources which, it is believed, it would put in pledge, if necessary, to secure this loan, namely, the customs receipts, the valuable salt mines (the production and sale of salt being a Government monopoly), and the Sabana Railroad (40 kilometers—24 miles—of well-equipped railroad between Facatativa and Bogotá).

French Wheat Crop of 1899.—Consul Atwell sends the following from Roubaix, under date of September 15, 1899:

The Exchange Bulletin has just published its estimate of the wheat crop in France and other countries. The provisional figures from France show a crop of 122,242,000 hectoliters (346,600,554 bushels) this year, against 131,050,220 hectoliters (372,049,474 bushels) in 1898. This is a falling off of 8,808,200 hectoliters (25,098,963 bushels) from last year, but an increase of 12,245,886 hectoliters (34,741,590 bushels) over the mean production of the last ten years, which is figured at 108,996,114 hectoliters (379,321,975 bushels). Taking the general needs of consumption in France at 124,000,000 hectoliters (380,158,000 bushels), the crop will meet the demand, if accounts be taken of the exceptionally abundant crop of last year, which has left a large unconsumed stock of old wheat available at present. The probable importation is figured at 1,500,000 hectoliters (4,255,500 bushels). This will probably be confined to hard wheat, which is not grown in France in sufficient quantity to meet the needs of manufacturers of alimentary pastes. The production of the world at large is estimated at 886,500,000 hectoliters (2,515,000,500 bushels), against 989,100,000 hectoliters (2,806,076,700 bushels) for last year, a decrease of 102,600,000 hectoliters (291,076,200 bushels). Comparing, however, the universal yield of this year with that of 1898, which was the most abundant ever registered, the deficit is not disquieting, as the yield of 1899 is about equal to the average.

British Harvest.—Under date of September 9, 1899, Consul Halstead, of Birmingham, transmits the following forecast of the harvest, from the London Daily Mail:

Both hay and oats are much better crops in Ireland this year than they have proved to be in Great Britain. The same result occurred last year.

The hay harvest in Great Britain is worse than was anticipated. The yield is estimated at 23 cwts. (1.15 tons*) per acre, the total crops being 150,740,000 cwts. (7,537,000 tons), which is 50,000,000 cwts. (2,500,000 tons) below last year's and about 11,000,000 cwts. (550,000 tons) below the average for the last ten years.

Wheat is regarded as a good average crop, while barley and oats are but moderate. The wheat yield is about 30 bushels per acre; barley, 32 bushels per acre; and oats, 35 bushels per acre.

Taken as a whole, and looking also at the poor root crops and the drying up of the pastures during the summer grazing season, it is clear that 1899 has been a poor year for the stock farmer, dairyman, and grazier, and only a moderate one for the corn grower. For the latter, also, prices are poor, the only grain now selling well being the better qualities of barley.

Steel-Plate Roadway in Great Britain.†—Consul Hopley writes from Southampton, September 18, 1899:

In the county of Down, Ireland, is a steel-plate roadway, known as the Benbrook and Newry Electric Railway. It is only 3 miles long, and has a rise of 180 feet. It has been in operation for sixteen years; it is an ordinary railway of 3-foot gauge. All the trains are mixed trains (passenger and goods or freight combined). The passenger line is built of ordinary steel rails, outside of and adjoining which is a lower line of steel rails. The wagons, without flanges on the wheels, run on the lower outside rails; the inner rails for the cars are high enough above the outer rail to act as a guide to the wagons, keeping them on the track. On either end of the line the wagons are detached from the train and taken to their destination over the regular streets and roads by horses. There are no terminal charges, so the cost of handling is light. There is no delay or difficulty in getting the wagons on or off the ends of the line. The cost of the road, including land and all, was about £16,000 ($77,860).

Precautions Against the Plague in Russia.—Consul Heenan writes from Odessa, August 28, 1899:

I saw the other day a curious device attached to the mooring rope, or cable, of a steamer which was loading at this port. The cable was run through a piece of iron pipe about a foot in length, and welded on the end of the pipe was a flange, or funnel, which looked like the end of a trumpet, with the wide end facing the ship. The iron pipe was stuffed with oakum, to prevent it from slipping and also to prevent rats from passing through it. This novel construction was quite close to the ship. On inquiring what purpose this device

* British tons of 2,240 pounds.

† This report was prepared in compliance with a request by the Department of Agriculture, to which Advance Sheets have been sent.

served, I was informed that the Russian authorities furnished these appliances and obliged all ships to use them whenever they came from a port infected with the plague, in order to prevent the rats on the ship from coming on shore. It is generally conceded that the plague has been carried and spread by rats which have left ships coming from infected ports. It is known that rats make use of the cable to come on shore, and this iron pipe with its funnel-shaped arrangement was employed to prevent such visits, if possible. These devices are attached to each cable by which the ship is moored. In addition to this precaution, the master of the ship is obliged to take down his loading stages every night and erect them again the following morning, in order to prevent the rats from coming on shore during the night. I do not know whether this device is known to our sanitary authorities, and I send this description of it in the hope that it may be of service.

Postal Shipments to Russia.—Consul Monaghan, of Chemnitz, under date of August 4, 1899, transmits the following instructions relative to postal shipments to Russia:

When a letter is found in a package sent by post, note of same will be made and signed by the customs official in charge. This note will contain the name of the place whence the letter comes, whither it is to go, when sent, and for whom and from whom. The letter is to be taken out and sent with the above-mentioned note to the postal authorities at the place whence the package came. A package containing a letter is to be sent forward to the addressee, under general regulations. The letter will also be delivered upon the party to whom it is addressed paying a fine. In case such payment is refused, the letter is to be forwarded to the general post-office. In cases where packages from foreign parts contain letters or notes or circulars in open envelopes, even though they have the character of correspondence, such inclosures will not be removed. The package, with its inclosures, will be delivered to the party to whom it is addressed.

Emigration of Jews to Palestine.—Minister Straus writes from Constantinople, September 13, 1899, in regard to the unfortunate condition of the immigrant Jews, many of whom appear to be paupers. He incloses a letter from Consul Merrill, of Jerusalem, which reads, in part:

The Turkish regulation requiring Jews arriving at Yafa to leave the country again in thirty or ninety days, if they come as visitors,

has, I understand, been agreed to by our Government. There is no provision, however, so far as I have been informed, as to how these people are to be made to return. As the Turks do not accept the word of the immigrants on landing, a system of money pledges has been resorted to. This may be called "fine," tax," "deposit," "backshish," "bail," or "pledge." It is a money guaranty that the parties will carry out the requirement of the Turkish Government. Unless they pay the guaranty, the immigrants have great trouble in landing. In many cases the consul is appealed to, and rather than see them starve or sent back to the steamer, which would probably not receive them again, he gives his word as security that they will leave the country at the expiration of the time specified. Respectable American Jews, coming here as bona fide travelers, encounter no more trouble than do Christian travelers. It is the immigrant class—Russian or Polish Jews—who are suspected by the authorities here as likely to swell the ranks of the colonists.

Congress of Medicine in Paris.—The Department has received from the French embassy, under date of Washington, August 3, 1899, programme of the international congress of medicine, to be held at Paris from August 2 to 9, 1900. Delegates from the United States are invited. Doctors of medicine or scientists presented by the French or foreign national committees will be accepted as members. Admission cards for members cost 25 francs ($4.82). French will be the official language, but German, English, or French may be used at the general meetings. Suggestions relating to the labors of the congress should be communicated to the executive committee before May 1, 1900. The sections of the congress are as follows: (1) Biological sciences—descriptive and comparative anatomy, histology, embryology and teratology, physiology, biological natural philosophy, and chemistry; (2) medical sciences—general pathology and experimental pathology, bacteriology, parasitology, pathological anatomy, internal pathology, hygiene and medical pathology of children, therapeutics and pharmacology, neurology, psychiatry, dermatology, and syphiligraphy; (3) surgical sciences—general surgery, surgery in the case of children, urinary surgery, ophthalmology, laryngology, rhinology, otology, stomatology; (4) obstetrics and gynecology; (5) public medicine—legal medicine, military medicine and surgery, naval medicine, colonial medicine.

The full text of the programme, giving the names of the foreign national committees and of the lecturers, as well as the titles of the papers to be read, has been filed for reference in the Department of State.

Medical Congress at Brussels.—The Department has received a note from the Belgian legation, dated New York, August 29, 1899, to the effect that an international congress of physicians of insurance companies will be held in Brussels September 25 to 28, 1899. The United States is invited to send delegates. The programme gives the following questions to be discussed: (1) Admissibility of syphilitics; (2) traumatic neurosis; (3) alcoholism, from a life-insurance point of view; (4) skin diseases; (5) anthropometry; (6) admissibility of glycorurics; (7) radiography in life insurance; (8) which neurasthenics may be admitted, which refused; (9) tuberculous heredity, considered with regard to its influence on life insurance; (10) the examination of the heart; (11) utility of a universal medical formulary; (12) medical statistics, various communications; (13) medical secrecy and insurance companies; (14) precocious diagnosis of general paralysis; (15) continuance of diseased conditions through life, contribution to the symptomatology of defects; (16) fraud in life-insurance matters; (17) admissibility of albuminurics. Assessment is fixed at 15 francs ($2.89).

Trusts in Germany.—Consul Brundage, of Aix la Chapelle, in an undated report (received by the Department August 19, 1899), says:

As trusts are now being discussed in the United States, it may be of interest to know that practically every industry in my consular district is managed in this way. The report of the chamber of commerce of this city, just issued, urges the formation of a trust in the pin industry. The manufacture of pins has heretofore been accomplished by hand labor; but, in view of the competition of American machinery, a combination of manufacturers, with the object of keeping up prices, is advised.

Last week, the owner of one of the oldest woolen-cloth factories in Aix la Chapelle, thoroughly conversant with the trade of every country, said, when I asked him why he did not erect a factory in the United States:

> We can make more money by manufacturing here. Your labor is too high, and your woolen-cloth men do not stand together; they cut prices too much. Here, we regulate our business, and can adapt ourselves to competition by controlling prices and labor. We made a great deal of money before the high tariff went into effect in the United States.

German Printing Paper.—Consul Monaghan writes from Chemnitz, August 25, 1899:

Up to 1896, Germany's printing-paper exports had a rapid annual increase. Since that time, a falling off has been noticeable. In the

ten years 1886–1896, the exports had about doubled. In 1896, they were 378,182 double hundreds,* worth nearly $2,230,000; in 1897, they were 321,368 double hundreds, worth $1,904,000; in 1898, they had dropped to 295,353 double hundreds, worth $1,761,200. The cause of this falling off is found in the very successful competition of United States paper makers. In 1896, Germany sent 10,490 double hundreds to the United States and in 1898 only 2,617 double hundreds. Germany's exports of printing paper to Great Britain have fallen off since 1896 fully one-third. The decrease in exports of printing paper to Holland is even comparatively larger. A falling off was recorded in the exports to Australia and South America. The Argentine Republic and Japan are the only countries in which an increase was recorded. In 1898, 38,360 double hundreds were sent to Argentina and 40,743 double hundreds to Japan, against 30,927 double hundreds and 20,656 double hundreds, respectively, in 1896. If the markets to which Germany sends paper are carefully canvassed, there is no reason why our exports in this line should not continue to increase.

Germany's Meat Imports.—Vice-Consul-General Hanauer writes from Frankfort, September 16, 1899:

Germany imported, during 1897, 47,986 tons of meat, valued at 39,900,000 marks ($9,496,200); in 1898, 83,597 tons, costing 72,500,000 marks ($17,255,000). Of this amount, the United States furnished 47,243 tons, valued at 39,700,000 marks ($9,448,600). Denmark sent 11,243 tons; Holland, 17,969 tons. The meat imported from the United States consisted mainly of fresh pork. Since 1894, Germany's meat imports from the United States have increased three and a half fold. Our manufacturers should give more attention to the export of smoked sausages. I see no reason why our country should not take the lead as a sausage exporter. There is no doubt that large contracts could be obtained from foreign governments for army uses, if a low price for sausages could be quoted.

A Suggestion to Exporters.—Consul Tourgée, of Bordeaux, under date of September 16, 1899, suggests that it would be advisable for exporters to let consuls know something about the success or failure of enterprises in which they engage in their districts. As it is now, he says, they write asking information about dealers, opportunities, etc. The consul writes perhaps a score of letters to get the

* 1 double hundred = 220.46 pounds.

information they want, tells them what they must do, and then hears nothing more from them. It is impossible for him to learn what is done or being done along the lines he has recommended. The French authorities report importations in a manner so different from our own that reliable comparison is literally impossible. Mr. Tourgée adds:

The French dealer is suspicion itself. He thinks anyone who asks about his business is an enemy, and the American exporter apparently imagines the consul has no interest in his business until his help is needed to collect a bad debt, which might never have been incurred if the consul had been informed with whom he was dealing and been asked to have an eye on his affairs. In my opinion, a consul is worth twice as much in looking after an enterprise already begun as in advising as to its institution.

Faulty Packing of American Goods.—Under date of August 9, 1899, Consul Hayden writes from Castellamare di Stabia:

American exporters not only do not properly pack their goods, but, even when especially requested to do so, fail to give that attention to the matter which the necessity of the case demands. Our people should remember that their responsibility ceases when the goods are "free on board" in the United States, and to trace an irregularity—not to use a harsher expression—is out of the question; for, even could it be located, the trouble and expense incident to the matter would outweigh the pecuniary interest.

I have succeeded in starting what promises to lead to trade in American bicycles and tricycles, and I gave especial directions to securely box the machine ordered. Instead of heeding the instruction, the machine was sent, not in a box, but in a crate. All the tools were stolen in transit, which caused a delay of six weeks and the cost of another set of tools, as they could not be had here. This has occurred in five instances.

Tuberculosis Among Belgian Cattle.—Consul Roosevelt, of Brussels, August 22, transmits the following:

The Minister of Agriculture has invited provincial agricultural societies to make known to farmers and cattle breeders, through the medium of lectures, notices, and circulars, the means of fighting the increase of tuberculosis among cattle. Their attention is to be notably drawn to the hygiene of stables, as in many districts, especially the Campine and Ardennes, the stables are very badly kept.

The peasants are afraid of leaving the doors of the stable open, on account of draughts, which they think highly injurious to the cattle, and it is difficult to make them understand that stables are contaminated when deprived of fresh air. Also, very little attention is given to cleanliness. Frequently the litter is allowed to accumulate for weeks and even months, until the unfortunate animals stand knee-deep in it. Under such conditions, it is easy to understand that such stables become propagating beds for the germs of tuberculosis. As it is difficult to make the peasants understand that upon the cleanliness of the stable largely depends the eradication of the disease among their cattle, it has been determined to organize competition, awarding premiums to farmers taking good care of their cattle and stables.

Transportation of Live Animals in Belgium.—Consul Roosevelt, under date Brussels, August 29, 1899, transmits the following:

Important changes have just been made in the regulations concerning the transportation by railway of live animals. The following is a summary of the changes:

The transportation of horses, donkeys, mules, ponies, and colts is not allowed on international or local trains, or on steam trams. Exception is, however, made for horses going to or returning from races, mares sent to be served, and horses of military officers traveling on duty.

The transportation of horses by slow freight is by mixed trains (composed of passenger and freight cars) and by freight cars selected by the administration, in boxes or special cars for horses.

It is forbidden to put more than one stallion in a car, and to load mares in the free boxes of a car containing a stallion.

The loading of restive horses will be effected by means of a special strap, which will hold the knees immovable and prevent the horse from kicking.

Concerning the transportation of cattle, shippers are allowed at their risk and responsibility to put in the cars as many animals as they may judge proper. It is, however, forbidden to ship bulls in the same cars with heifers or cows.

Belgian Vehicle Regulations.—Under date of Brussels, August 28, 1899, Consul Roosevelt transmits the following:

The various accidents which have caused so much popular and press agitation have at last resulted in a legislation on the subject of carriages, bicycles, and automobiles, and the following rules will be enforced by the police:

All carriages must keep to the right throughout Belgium.

All self-propelled carriages, not bearing the regulation number of the province, must carry the owner's name and address.

All automobiles and autocycles must carry, both in front and behind, a number large enough to be seen at a distance, and after sunset each number must be lighted by a lamp.

All automobiles, autocycles, and bicycles, without exception, must be provided with a brake.

Road racing is forbidden, except with the consent of the burgomasters (mayors) of the villages through which the racers pass.

The maximum speed allowed is 30 kilometers (18.64 miles) an hour in the open country, and 12 kilometers (7.46 miles) an hour in towns.

Cyclists are strictly enjoined to keep their hands on the handles and their feet on the pedals while riding.

Cyclists are allowed to choose their own alarm bell, but rubber-tired carriages must carry bells.

Belgian Treatise on Flax Disease.—The following, dated August 3, 1899, has been received from Consul Atwell, of Roubaix:

Research into the nature of the malady known as flax burn has been made by the botanical laboratory of the Agricultural Institute of Gembloux, Belgium, and it is now known that this disease arises from a microscopic fungus growth living in the cells of the roots and the radical hairs of young flax plants.

In a circular addressed to the State agriculturalists, Mr. Bruyn, Minister of Agriculture, has set forth the result of his researches. As the parasite is internal and subterraneous, there is no method of direct treatment. The use of different manures has not thus far given any satisfactory result.

The only remedy is to uproot the diseased plants and destroy them, so that the germs shall not spread; to abandon the culture of flax on the infected soil for at least seven or eight years; also to avoid planting turnips or colza in the soil thus abandoned, as these are thought to harbor the parasite.

Belgian Enterprise in Egypt.—Under date of August 22, 1899, Consul Roosevelt, of Brussels, says:

From recent reports, it appears that the Belgians are getting a firm commercial foothold in Egypt. Such enterprises as the railway of Lower Egypt (Mansourah and Menzaleh), tramways of Alexandria and Cairo, and the Industrial and Agricultural Society of Egypt, the Crown Brewery at Alexandria, the joint-stock company, Rolin Padova & Co. at Cairo and Alexandria, and the importing house of Lambert et Ralli at Alexandria are in a prosperous condition.

Among others that are thriving may be mentioned the Sleeping-Car Company, conducting a service between Cairo and Luxor, and the Société Anonyme des Grands-Hotels.

Newspaper Reports Regarding Jamaica.—The Bureau of Foreign Commerce has received the following letter:

THE ASSOCIATED PRESS,
GENERAL OFFICE,
New York, October 16, 1899.

Chief of the Bureau of Foreign Commerce.

DEAR SIR: Since the publication in ADVANCE SHEETS OF CONSULAR REPORTS of the arraignment of the reports of the Jamaican correspondent of this association on charges of inaccuracy and falsehood,* I have had an investigation made to ascertain the facts.

The primary instructions to our agents and representatives throughout the world being to maintain absolute accuracy in their reports, these charges were regarded as sufficiently grave to warrant thorough inquiry. I am able to report, therefore, in consequence of this inquiry, that every one of the statements made by our correspondent, in the dispatch held up by the colonial authorities as a sample of inaccuracy, was extracted mostly verbatim from official communications published in the newspapers of the island, together with comments published by the official organs of the local government at Kingston, Jamaica, which, it may be reasonably assumed, are proper sources upon which to draw for information as to the internal affairs of the island. A comparison of the dispatch quoted by the colonial authorities with newspapers of the corresponding date published at Kingston, Jamaica, verifies the statements of our correspondent on this point; hence we respectfully submit that it would appear to be only justice for the Bureau to make these facts known as publicly as were the criticisms contained in the article of September 19, 1899.

Respectfully,

CHARLES S. DIEHL,
Assistant General Manager.

Mining in the Yukon Region.—Under date of July 28, 1899, Consul McCook transmits the following:

More men are working on claims this summer than last; they think it more profitable than working in winter. Many good claims have thawing and pumping machinery. The work is continued during the twenty-four hours, and dynamos for electric lighting in the winter are being established. The local government has appropriated $10,000 for the improvement of the trail to Eldorado, and by next winter it is understood that a steam or electric road will be in operation.

Staking by power of attorney was allowed by the Cape Nome Mining Association, and in this way a few men have gained control of an enormous tract of country.

The companies have been cutting wood for their steamers. Along the Yukon, I am informed, there are some 50,000 or 60,000 cords of wood.

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*See *ante* p. 479.

Persons who come down the river via Skagway, if not in possession of the necessary $500 or six months' provisions required by the order of the Yukon authorities, must, before passing through Canadian territory via Dawson, make affidavit that they will not stop in Dawson, but proceed to Alaska.

Telegraph to Dawson.—Under date of September 22, 1899, Consul Dudley, of Vancouver, informs the Department that the telegraph line from Skagway to Dawson has been completed and is now in operation. The nearest point to Skagway reached by telegraph, adds the consul, is Cumberland or Comax, British Columbia. It is stated that arrangements will be made for steamers to call at Comax to deliver messages brought from Skagway and on their north-bound trips for messages to be delivered at Skagway. This places Dawson within about two and one-half days by telegraph. Mr. Dudley has also been informed that officers are at work surveying a line from Ashcroft, on the Canadian Pacific Railway, via Quesnelle, British Columbia, to Telegraph Creek, in the valley of the Stikine River. As soon as the survey is completed, it is expected that a telegraph line will be constructed; a branch line to Atlin, British Columbia, from Lake Bennett will also soon be in operation.

Money-Order Department in Dawson City.—Consul McCook writes from Dawson City, July 28, 1899:

A money-order department has been opened here, which is a great convenience to parties sending out small amounts, as the cost is but 5 cents for a $50 order. The first installment of second-class mail matter arrived July 5; the down-river mail comes in about twice a week.

Petroleum and Naphtha in Canada.—Under date of September 11, 1899, Consul McCullough sends from St. Stephen copy of instructions issued to collectors of customs in Canada containing the following provisions relating to the importation, inspection, and storage of petroleum and naphtha:

Petroleum and naphtha (not in bulk in tank ships, vessels, or barges) may be imported in tank cars, barrels, or other packages at any port or outport of entry in Canada.

Petroleum which, when tested by the method set forth in the petroleum inspection act, will not flash at a lower temperature than 85° F., may be imported in tank ships

at such customs ports only as are from time to time designated by the Governor-General in council.

Petroleum may be put up and sold without inspection marks and irrespective of the size of packages, and the inspection fees have been abolished.

Packages containing naphtha are to be branded as such, and they are to be painted red, while packages containing petroleum may be painted any color other than that provided for packages containing naphtha.

All petroleum and naphtha imported into Canada, whether in tank cars, tank ships, barrels, or other packages, shall be inspected as required by the act before customs entry.

Canadian Railway Enterprise.—Commercial Agent Boardman writes from Rimouski, August 31, 1899:

This railway company has a subsidy from the Province of Quebec of $3,500 per mile for 20 miles up to Paspebiac, and $3,500 per mile from Paspebiac to Gaspé, a distance of 82 miles. The Dominion Government has just granted an additional subsidy of $6,400 per mile for 30 miles up to Paspebiac, and $6,400 per mile from Paspebiac to Gaspé. The road is now in operation from Metapedia on the Intercolonial Railway to New Carlisle, a distance of 98 miles. Three miles more will complete it to Paspebiac, earning the subsidy from both governments to that point. This and the subsidy granted by the provincial and dominion governments will enable the company to complete the road to Gaspé.

Should any American wish to sell the company rails, rolling stock, or bridges, address Atlantic and Lake Superior Railway Company, 35 St. James street, Montreal, Canada.

Inspection of Forestry in Canada.—The Department has received the following from Commercial Agent Beutelspacher, dated Moncton, August 30, 1899:

An inspector of timber has been created by the Dominion Government. With the view of preserving the remaining forests upon Dominion lands and Indian reserves from utter destruction by fires and other destructive agencies, and of encouraging the reproduction of forest trees, and also, as settlement is rapidly progressing in all parts of Manitoba and the Northwest Territory, with the object of making an immediate inspection of the country, to ascertain what tracts should be set apart for timber reserves before they are encroached upon by settlers, the position of Chief Inspector of Timber and Forestry has been created. The headquarters of the inspector will be at Ottawa and his salary will be $2,500 per annum.

Agricultural Conditions in Ontario.—Consul Seyfert, of Stratford, under date of August 29, 1899, writes:

During the months of July and August, but a fraction of an inch of rain has fallen upon the territory of this consular district. The result is most alarming. The country is parched and all vegetation dried up. Fields are as bare as the roads. Farmers are compelled to feed their stock out of the barns. Streams that were never known to give out are now perfectly dry. Wells and cisterns are exhausted, and a most appalling condition of affairs confronts the Ontario farmers unless rain (of which there is no sign at present) speedily comes to their relief. By the latter part of August much of the winter wheat is usually sown; but this season, on account of the prolonged drought, very little plowing has been done. The forepart of the season was very favorable and the early spring crops generally are good, but the late, or fall, products are an almost entire failure. The apple crop will not amount to 25 per cent of a full one. In many sections, what few there are have been injured by the drought and are worthless.

The Department has received the following from Mr. C. C. James, deputy minister of agriculture of Ontario, dated Toronto, September 26, 1899:

The attention of this department has been called to the report of Consul Seyfert, of Stratford, which appears in Advance Sheets No. 534 (September 21, 1899). This report has been copied into a number of papers, and, unless it is carefully read, the reader is apt to apply it to a larger area of the Province than the consul originally intended. The condition here referred to applies to but a very small area indeed. The consul has probably been in the very center of the district which has fared worst. The condition of affairs there referred to is not very widespread. The crops on the whole have been quite up to the average, the only exception being fall wheat, which suffered from the severity of last winter.

British Trade Reports from South America.—Requests having been made of the Bureau of Foreign Commerce for copies of the reports made by Mr. Worthington, special commissioner of the British Board of Trade to investigate commercial conditions in South American countries,* readers of CONSULAR REPORTS are informed that reprints of the Worthington reports are about to be issued by the Bureau of the American Republics, No. 2 Jackson place, Washington, D. C. The first two reports are on Chile; the third, on Argentina; the fourth and fifth, on Brazil; and the sixth, on Uruguay.

* For summaries of some of Mr. Worthington's reports, see CONSULAR REPORTS No. 222 (March, 1899), p. 482, and No. 224 (May, 1899), p. 1.

United States vs. German Trade in Argentina.—Consul Winter, of Annaberg, under date of August 15, 1899, writes that in a recent article the Deutsche Export Zeitung of Berlin expatiates on the danger to German exports to Argentina in the increasing American competition. Among other things, the article says:

> The efforts made by American business men are certainly worthy of emulation. American commercial travelers appear in every city and town, and work in unison with local agents of the various products. Exhibition rooms for samples have been established in all the larger cities, and the country has been simply flooded with catalogues and price lists.
>
> Here, as everywhere in the world's markets, we must prepare for a hard battle with American competition. It will need all our energy and resources to enable us to hold our own.

Water Famine in Maracaibo.—Consul Plumacher writes from Maracaibo, August 22, 1899, in regard to the scarcity of water. No rain, it appears, has fallen for months, and the situation is becoming serious. The state of Zulia, he adds, is not a manufacturing state, but relies entirely upon agriculture and cattle raising. The price of every article of food has risen 20 per cent during the last three weeks; meat alone is comparatively cheap, as the people have to kill their cattle. Everything is suffering for water except the cocoanut trees, which are flourishing. This industry, says the consul, is undoubtedly profitable, as these trees seem to grow best without rain.

Cocoanuts in Honduras.—Consul Johnston writes from Utilla, September 1, 1899:

The shipments of cocoanuts have fallen off 50 per cent. They now bring the planters $8 to $10 gold per thousand. The shortage will extend to Bay Island, north coast of Honduras, Guatemala, and British Honduras. It is due to the damage done by the storm last October and November.

German-Guatemalan Trade-Mark Convention.—Consul-General Beaupré, of Guatemala, under date of August 22, 1899, sends translation of an agreement recently celebrated between the Governments of Guatemala and Germany, according to which merchants residing in either country shall enjoy in the other the same protection and privileges in regard to trade-marks as native merchants.

Proposed Steamship Line from Spain to Peru.—The secretary of legation at Lima, Mr. Neill, under date of September 9, 1899, sends an article from El Comercio of that city, treating of the proposed line of steamers between Peru and Spain. A representative of the Transatlantic Steamship Company, of Barcelona, is now in Lima. This company, it appears, has just made a contract with the Chilean Government to give a monthly service to Valparaiso in return for a moderate subvention. Low freight rates will be charged on cargo for Chilean ports. If the voyages of these steamers were extended from Valparaiso to Callao, says the article, it would benefit not only the Peruvian-Chilean trade, but also the trade of Peru with Spain.

Antwerp-San Francisco Steamship Service.—Consul-General Lincoln, of Antwerp, on August 30, 1899, reports that according to the Matin, the leading morning journal of that city, the German steamship company Kosmos has decided to establish a monthly steamship communication between the ports of Antwerp and San Francisco direct, touching at Pacific ports.

The steamer destined to inaugurate this new service, the *Tanis*, will leave Antwerp on the 23d of September next.

New Steamship Line to Antwerp.—Under date of Antwerp, September 13, 1899, Consul-General Lincoln says:

I have received this day from Messrs. Steinmann & Co., agents of the Leyland line of steamships, information regarding the establishment of a direct service by steamers of the above-mentioned line between Antwerp and Portland, Me. It is the intention to maintain a fortnightly service between the ports mentioned, and the sailings for the near future are fixed as follows for this port: Steamship *Almerian*, leaving on the 15th of November; steamship *Albanian*, leaving on the 29th of November; steamship *Assyrian*, leaving on the 16th of December; steamship *Almerian*, leaving on the 30th of December.

Wages for Children in Germany.—Under date of Frankfort, September 16, 1899, Vice-Consul-General Hanauer writes that in the official report of the Government inspector of factories for Coburg-Gotha, details are given as to the labor of children under 14 years engaged in their homes in making buttons, toys, etc. It appears

that in this district, 5,455 such children are employed. They work from four and one-quarter to six hours per day and earn in button making from 4 to 30 pfennigs (fifteen-sixteenths of 1 cent to 7 cents); in making dolls, 2⅛ to 18½ cents; in work on toys, 1⅞ to 14 cents.

Russian-Siamese Commercial Treaty.—Minister King sends from Bangkok, July 8, 1899, copy of the declaration exchanged between Russia and Siam June 11–23, 1899, which, translated, reads:

The Imperial Government of Russia and the Royal Government of Siam, desiring to facilitate intercourse between the two countries, have agreed upon the following treaty of friendship and of commerce:

That for everything which relates to jurisdiction, to commerce, and to navigation, Russian subjects upon the territory of Siam and Siamese subjects upon the territory of Russia shall enjoy hereafter, until the expiration of the present order, all the rights and privileges granted to subjects of other nations, in Siam or in Russia, by treaties actually in force, as well as by treaties which may be made in the future. This treaty shall go into effect on the day of the signature and continue until the expiration of six months after the day when one or the other of the high contracting parties shall declare its desire to terminate it.

Greek Quarantine Regulations.—Under date of Athens, August 23, 1899, Consul McGinley writes that the following changes have been made in the quarantine regulations of Greece:

(1) All arrivals in Greek ports from ports in Egypt and the Red Sea are required to undergo a strict quarantine of eleven days, instead of twelve days as decreed June 26, 1899.

(2) Any vessel from ports of Egypt and the Red Sea that shall have undergone ten days' effective quarantine and a disinfection of the vessel and baggage of both passengers and crew, in a European port, and has there communicated with the public, shall be subjected only to a strict medical examination upon its arrival in a Grecian port.

Tobacco in Spain.—Consular Agent Mertens, of Grao, under date of August 18, 1899, says:

In my report of February 15, 1899,* I drew attention to the demand for American tobacco by the Spanish tobacco monopoly. Since then, there has been a purchase of 5,000,000 kilograms (11,023,000 pounds) of Kentucky tobacco from a Paris syndicate. This will be delivered by December, when another purchase has to be made. American tobacco dealers ought to be able to offer directly to better advantage.

* See CONSULAR REPORTS No. 224 (May, 1899), p. 194.

Textile Plants in Russia.—The Department has received a letter from Mr. W. Toritch, 11-13 William street, New York, explanatory of the terms "slanez" and "machenez," used in a report by Consul Atwell, of Roubaix, on textile plants in Russia, printed in CONSULAR REPORTS No. 229 (October, 1899), page 227. Mr. Toritch calls attention to the fact that these words refer to different kinds of flax. "Slanez" is adopted for flax which is spread out upon the fields before being stripped, and originates from the verb sliat, which means spread. "Machenez" is a flax which is soaked in water and received the name from the verb motchit, which means to soak.

Proposed Protection of Danish Agriculture.—Vice and Deputy Consul Blom, of Copenhagen, on August 21, 1899, writes:

The Royal Danish Ministry of Finance has just appointed a commission to consider and report on the question whether or not protection, by duties on foreign agricultural products, would be of advantage to Danish agriculture, and how such protection could be carried out.

Walnut Crop of Italy.—Consul Byington writes from Naples, August 1, 1899, that there will be a shortage of fully one-third in the walnut crop, as compared with last year's product; but the quality promises to be superior to the average of several previous years. Two-thirds of the crop, which will commence to be shipped from Naples about the 1st of October, it is expected, will go direct to New York and the remaining third to Liverpool and London.

Duty on Collodion in the Netherlands.—Minister Newel writes from The Hague, August 22, 1899, that, according to a royal order appearing in the Official Gazette of even date, it is decreed that, subject to certain regulations as to quantity admitted, destination, etc., so as to guard against abuse of the privilege, collodion required in the preparation of incandescent-light mantles shall be exempted from import dues.

Tolls in Belgium.—Under date of September 2, 1899, Minister Newel transmits from The Hague copy of a law recently passed, according to which, from May 1, 1900, all State tolls on roadways, canals, harbors, sluices, and bridges, with the exception of two bridges, one roadway, and three military barriers, will be abandoned.

Belgian Demand for Refrigerators.—The following, dated August 24, 1899, has been received from Consul Le Bert, of Ghent:

The firm of Dutry-Colson, rue des Champs, of this city, requests names and addresses of manufacturers of refrigerators. This firm is thoroughly reliable and one of the largest in its line in Belgium. There is a good field here for American refrigerators.

Belgian Taxes on Automobiles.—Consul Roosevelt writes from Brussels, August 21, 1899, that a royal decree has approved the resolution of the provincial council of Brabant fixing an annual tax, after January 1, 1900, on automobiles of whatever system. The rate is fixed at 50 francs ($9.65) for an automobile weighing 400 kilograms (880 pounds) or more, and 20 francs ($3.86) for one weighing less.

Tin in the Straits Settlements.—The following, dated Singapore, July 19, 1899, has been received from Consul-General Moseley:

The advance in the price of tin at this place since last December is extraordinary. It is claimed here that three-fourths of the world's production of tin is smelted in Singapore, and oxide of tin comes from the protected native states of the Malay Peninsula. Large shipments are made from here every week to the United States.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
J. G. Stowe, Cape Town...	Aug. 22, 1899	Dairying	Department of Agriculture.
A M. Beaupré, Guatemala.	Sept. 4, 1899	do	Do.
J F. Gowey, Yokohama.....	Aug. 26, 1899	do	Do.
A. L. Frankenthal, Berne..	Sept. 5, 1899	do	Do.
A. E. Smith, Victoria.....	Sept. 23, 1899	do	Do.
H. W. Bowen, Teheran.....	Aug. 26, 1899	do	Do.
J. B. Terres, Port au Prince.	Sept. 20, 1899	do	Do.
A. W. Tourgée, Bordeaux..	Sept. 24, 1899	do	Do.
E. D. Winslow, Stockholm..	Sept. 18, 1899	do	Do.
D. Swiney, Cork.....	Sept. 20, 1899	do	Do.
W. J. Sulis, Liverpool.....	Sept. 21, 1899	do	Do.
B. H. Ridgley, Geneva.....	Oct. 6, 1899	do	Do.
E. Schneegans, Saigon.....	Aug. 1, 1899	Rice report	Do.
Do.....	Aug. 15, 1899	do	Do.
J. F. Gowey, Yokohama.....	Sept. 1, 1899	Hydrographic information..	Navy Department.
W. F. Grinnell, Manchester	Sept. 14, 1899	Health of Manchester.....	Marine-Hospital Service.

FOREIGN REPORTS AND PUBLICATIONS.

French View of the Franco-American Treaty.—The Revue du Commerce Extérieur, Paris, August 19, 1899, has the following:

The treaty which has just been signed between France and the United States is one of the economic events of the second half of the nineteenth century. Many people will be surprised at this language. The Franco-American treaty and the French treaties with Switzerland and Italy seem alike. Their economic import is mediocre from a general point of view. As a matter of fact, the present agreement should be compared with the famous Franco-English commercial treaty negotiated between Rouher and Richard Cobden. It means nothing less than the entrance of American manufactures on the European market, the commencement of manufacturing competition between the New World and old Europe.

To thoroughly appreciate the situation, we should study the economic policy of the United States. Until the end of the war of secession, the United States had no need of a customs policy. The country was a vast work field. The people in the North cultivated corn and wheat, raised cattle and hogs; in the Middle States, they bored for petroleum; in the South, they cultivated cotton; the West sent wheat and salt provisions; California and Colorado, gold and silver as payment for the manufactures of Europe, as well as for the sugar, tea, and coffee furnished by Cuba, China, and Brazil. All this was enough to absorb American activity, busy, at the same time, in the creation of a network of railways. In this economic system, customs duties had only one purpose—the furnishing to the federal power the financial resources sufficient for the needs of the Government. These needs became pressing after the civil war, with the necessity of redeeming a debt of several billions. The entrance duty, more easy to collect than an excise duty in a land enamored of individual liberty, was then assessed by the Government at Washington.

The building of railways has created new manufacturing industries; iron and coal mines abound, and Americans are most ingenious in the invention of machinery, more useful in the United States than elsewhere, hand labor being expensive, in spite of the number of immigrants. The lowering in cost of freight and of wheat, hastened by the multiplication of railways in the United States and in India, as well as by the development of steam navigation, gave a powerful impetus to the manufacturing movement. Agricultural profits became less, public lands more scarce. At last, capitalists began to find competition with European products troublesome.

The constantly increasing production of manufactures, aided by the universal employment of machinery, forced them to seek new outlets. Thence, the thought of a pan-American Zolverein, the favorite plan of Secretary of State Blaine. It was proposed to offer the states and colonies of America exemption from duty on colonial products in exchange for reduction of duties on agricultural machinery and food products coming from the United States. Treaties of reciprocity mark this step in the evolution of the American commercial policy.

Later, there was an attempt at reaction against the protective system. But in spite of commercial crises, North American manufactures acquired new strength on their own territory. In a country where capital is enterprising and manufac-

tures are protected, the power of production soon exceeds the home needs. By the aid of machinery, the net cost of production declined, all the more as the tariffs of 1890 and 1895 lowered the duty upon certain raw materials and half-manufactured products. On the other hand, manufactured articles were exported in increasing quantities. Americans began to think of new outlets for their products, not alone in the republics of the south, but in the markets of the world. This was not an economic revolution, as was the treaty of commerce of 1860 between France and the United Kingdom. The Anglo-Saxons have a horror of sudden changes—of leaps into the unknown. They limited themselves to opening new gaps in the tariff. It had been absolutely autonomous and fiscal; then protective while remaining autonomous—that is to say, independent of the commercial needs of other countries. Treaties of reciprocity had been introduced only in favor of countries producing colonial commodities. In the act of 1897, provision is made for a double customs tariff. A minimum tariff was not prepared beforehand; it was left to the President to grant a reduction of duty within the limit of 20 per cent. In exchange for these reductions, the countries contracting with the United States must facilitate the importation of American products. It was, in a sense, the abandonment of the autonomous tariff and the introduction of the conventional tariff, after the European fashion.

The American policy preserved its individual character, in that it did not tend to the generalization of the conventional tariffs to be established. Its aim was to make an opening in the general tariffs of foreign countries, without entering into the European commercial community created by the most-favored-nation clause. With a prudence worthy of praise, the American legislators did not enter at once on this path, preferring to experiment in advance. Article 3 of the customs law of 1897 was enacted almost exclusively for the purpose of negotiating a treaty with France. It treats only of wines, including champagne, brandy, and tartar—preeminently French productions. In reducing the duties, conditionally, on these productions of the French vine, the United States meant to preserve the advantage of the treaty negotiated in 1893 with our country. The treaty concluded, other powers were informed that these concessions were applicable only to France. Negotiations were then entered into to put the plan in application. This has just been done by the signing of the agreement of the 24th of July.

In its edition of September 16, 1899, the Revue says further:

The commercial treaty with France has broken the first link in the chain which protected European industry against American competition. The United States will now invade with giant steps the markets of the Continent. Its only drawback will be ignorance of commercial customs—the employment of measures other than metric, the lack of knowledge of the languages, the absence of assortments of goods suited to special needs, and the aversion of American exporters to granting credits. These obstacles are evidently not insurmountable. When the Americans have mastered them, our manufacturers will be placed in a very trying position.

Colonial College in Germany.—The Revue du Commerce Extérieur, Paris, August 5, 1899, announces the opening of a "colonial college" at Witzenhausen, near Cassel, for the study of colonial resources and for the education of planters. A society founded the college by subscribing a capital of about $28,000, to which there have been added nearly $5,000 more by private subscription. Krupp,

the maker of the famous guns, has given $2,400 and Emperor William $1,150 more. This capital is sure to increase in the future. The management has commenced by buying a tract of land, where trial gardens, greenhouses, etc., will be established. There are sixteen entries of prizes, and it is expected that the college will open with twenty pupils.

Trade of the Transvaal in 1898.—The Board of Trade Journal, London, September, 1899, has the following figures concerning the trade of the Transvaal for 1898. It appears that there has been a considerable reduction in the actual amount returned during the year under review.

The total value of imports was as follows:

Year.	Value.	
1898	£10,632,895	$51,744,984
1897	13,563,827	66,008,364
1896	14,088,130	68,559,885

The figures for the customs show the following collections:

Year.	Amount.	
1898	£1,058,224	$5,149,847
1897	1,289,039	6,273,108
1896	1,355,486	6,596,473

Thus, while the decrease in customs between 1897 and 1898 was £230,815 ($1,123,261), the decrease in the value of imports was £2,930,932 ($14,258,381).

The value of goods imported from abroad by the three principal routes for the last three years was as follows:

Year.	Cape Colony.		Natal.		Delagoa Bay.	
1898	£3,188,876	$15,518,665	£1,843,543	$8,971,602	£1,781,252	$8,668,463
1897	4,184,439	20,366,572	2,330,020	11,339,042	2,658,222	12,036,237
1896	6,035,920	29,373,804	1,554,427	7,564,619	1,674,031	8,146,672

As regards the importation from Europe and America, the figures are as follows:

Year.	Europe.		America.	
1898	£6,332,174	$30,815,525	£391,930	$1,907,371
1897	8,627,136	41,983,957	422,688	2,057,011

These figures show a decrease of £2,294,962 ($11,168,433) and £30,749 ($149,640), respectively. The figures for other places show a similar decrease.

Generally, adds the article, the report seems to show that although the reduction of duties may account for some diminution in the customs collection, the decrease in the value of the imports must to a great extent be ascribed to the general depression in trade during the past twelve months, and to the want of confidence on the part of business houses and commercial and mining companies.

Trade of Tonga in 1898.—From a British Foreign Office report (annual series No. 2267) the following table of the value of the commerce of Tonga for the year 1898 is taken:

Country.	Imports.	Exports.
Azores		$26,960
France		31,027
Germany	$8,080	
Guam		57,226
New South Wales	48,279	39,454
New Zealand	91,551	23,743
Samoa	17,778	6,565
Other countries	5,495	7,078
Total	171,183	192,053

The prosperity of Tonga, continues the report, depends chiefly upon the cocoanut trees. In 1898 the export of copra was 75 per cent of the whole. There is an opening for capital in the institution of a factory and farm for the cultivation and extraction of fiber and the distillation of oil from flowers. Labor can be had from Savage Island at from 30s. to 40s. ($7.30 to $9.73) per month. Ramie, pineapples, and aloes grow to perfection.

Manufacture of Tiles from Slag.—In a British Foreign Office report (annual series No. 2344), the following paragraph occurs:

Attention is called to a new manufacture of tiles obtained from slag. The slag in a liquid state is conveyed into a large receptacle for water, with which it is mixed. To this mixture lime is added, and the stuff is then taken by means of pipes into wooden boxes. These are taken back to the tile sheds, where the stuff is pressed and formed into tiles and dried by steam. The tiles are gray in color and are remarkable for their durability, being specially suitable for buildings whose foundations are in damp ground, for water receptacles, reservoirs, etc. The slag was formerly used as refuse for road mending. The present manufacturers have concluded a twenty-five years' contract with the mines for a constant supply of slag.

Improvements at Tsintau.—A British Foreign Office report (annual series No. 2307) from Chefoo gives details of interest in regard to the port of Tsintau, as follows:

It is the intention of the Government to place a harbor light on the eastern point of the entrance to Kyao-chau Bay. There are at present two anchorages, a southern one—Tsintau Bay—protected on the north, but exposed to the southeast. This is the winter anchorage. The summer anchorage is inside Kyao-chau Bay, and north of Tsintau. This is, however, exposed to north winds. An artificial harbor is in course of construction, which will embrace the present summer anchorage, and the necessary protection from the north winds will be afforded by a mole running from Woman's Island in the direction of the Horseshoe Rocks. A portion of the harbor will have to be artificially deepened, and a system of docks and wharves has been provided for. An elaborate system of drainage is being constructed—concrete drains about 6 feet in diameter will run under the principal roads and connect with smaller drains from the side streets. These drains, with few exceptions, have been blasted out of the solid rock. The streets will be wide, and will, as a rule, run at right angles to each other. They will be lighted by electricity. A large military hospital is in course of erection; new barracks for a portion of the troops have been built, and godowns for some of the shipping firms. The only tax levied is on land, at the rate of 6 per cent on the assessed value. It has been thought advisable to connect Kyao-chau with its port on the Bay Ta-Pu-tou, or Matou, by means of a light railway. It is hoped that the line as far as Wei-hsien—the first coal district of importance—will be completed in two years' time. A portion of the line between Tsintau and Kyao-chau City has been surveyed. Most of the important German firms in China are represented in Tsintau, but at present they can not have much business. It is more the prospect of future development which has induced them to establish themselves here. The firm of Diederichsen, Jebsen & Co. has two regular steamers. It has also the contract for carrying mails and the monopoly of the conveyance of Government stores, which come in large quantities. The steamers are small and not adapted to the China trade, and their passenger accommodation is of the worst. It is, however, understood that Messrs. Butterfield & Swire will run regular steamers, which should bring down the present high freights (3 taels, or about $2.10, per ton) from Shanghai.

CONTENTS.

		Page.
I.—The International Motor-Carriage Exposition at Berlin	*Mason*,	517
II.—New German Canal	*Warner*	523
III.—American Iron in Germany	*Hanauer*	524
IV.—Commerce of Italy	*Monaghan*	525
V.—Iron Production in Europe and America	*Monaghan*	526
VI.—Proposed Bridge Across the Rance, France	*Thackara*	526
VII.—Invention for Preventing Railway Collisions	*Tourgée*	529
VIII.—New French Steamer	*Brittain*	531
IX.—Electric Tramways in Northern Spain	*Lay*	532
X.—Steel Roadway in Spain	*Washington*	534
XI.—American Trade Competition with Great Britain..	*Halstead*	536
XII.—Excessive Freight Charges to Great Britain.....	*Halstead*	537
XIII.—British Shipping Trust	*Halstead*	538
XIV.—Trade Notes from the Midlands	*Halstead*	540
XV.—New Russian Dredge	*Lincoln*	543
XVI.—Lease of Gold-Bearing Land in Siberia	*Peirce*	553
XVII.—Extension of American Trade in Russia	*Monaghan*	555
XVIII.—American Commerce in Turkey	*Dickinson*	558
XIX.—Railways of India	*Patterson*	560
XX.—Tramways in Bombay	*Fee*	561
XXI.—Street Railways in Veracruz	*Pagés*	562
XXII.—Waterworks and Sewerage in Tampico	*Pressly*	563
XXIII.—Matches in Mexico	*Pagés*	565
XXIV.—Demand for Boilers, Engines, etc., in Guadeloupe	*Aymé*	566
XXV.—Openings for Capital in Paraguay	*Ruffin*	567
XXVI.—Bleached Cotton Goods in Paraguay	*Ruffin*	569
XXVII.—Textile Plants in Paraguay	*Ruffin*	570
XXVIII.—Southern Brazil	*Seeger*	571
XXIX.—The Tasajo, or Dried-Beef, Industry in the River Plata Countries	*Jones*	583
XXX.—Tin in Straits Settlements: Opening for Capital	*Moseley*	584
XXXI.—Shipping Lines to New Caledonia	*Wolff*	588
XXXII.—Export Duty on Formosa Teas	*Goodnow*	588
XXXIII.—Tariff Regulations of Kyao-chau	*Mason*	589

		Page.
XXXIV.—Chinese Mining Regulations	*Conger*	590
XXXV.—Silkworms in China	*Barchet*	592
XXXVI.—Regulations for New Ports in Japan	*Buck*	593
XXXVII.—Japanese Market for Wood Pulp	*Bordewich*	594
XXXVIII.—Constitution of the Commonwealth of Australia	*Bray*	595
XXXIX.—Commercial Fertilizers in South Australia	*Murphy*	615
XL.—Agricultural Possibilities in the Yukon Territory	*McCook*	620
XLI.—Suppressing the San José Scale in Canada	*Beutelspacher*	621
XLII.—Cranberry Cultivation in Canada	*Beutelspacher*	622
XLIII.—World's Coffee Trade	*Pitcairn*	623
XLIV.—Export of Mocha Coffee to the United States	*Cunningham*	625
XLV.—The World's Hop Crop in 1899	*Dünkelsbühler*	626
XLVI.—Russia's Hop Industry in 1898	*Holloway*	628
XLVII.—Export of Malt from Hamburg	*Pitcairn*	629
XLVIII.—American Apples in Germany	*Sauter*	631
XLIX.—Sheep and Wool in Germany	*Pitcairn*	632
L.—The Grain Situation in France	*Skinner*	633
LI.—Belgian Regulations for Manufacture and Sale of Cheese	*Roosevelt*	634
LII.—Aphthous Stomatitis in Belgium	*Roosevelt*	634
LIII.—Plan to Sell Goods in Europe	*Halstead*	635
LIV.—Trusts in Germany	*Guenther*	636
LV.—Parcels-Post Exchanges with Germany	*Mason*	637
LVI.—Savings Banks of France	*Covert*	638
LVII.—Government Advertising in France	*Tourgée*	640
LVIII.—Cost of Running Automobiles	*Halstead*	641
LIX.—Precautions against Tuberculosis	*Covert*	642
LX.—American Bridge in the Sudan	*Choate*	644
LXI.—Trade Notes from South Africa	*Stowe*	646
LXII.—Gold Production of Transvaal, August, 1899	*Hill*	648
LXIII.—Leather Industry in Cape Colony	*Stowe*	650
LXIV.—Taxation in Mauritius: Bubonic Plague	*Campbell*	651
LXV.—Railway Congress at Paris		651
LXVI.—Notes (Recent Imports into Hawaii—Development of New Caledonia—American Railway Machinery in India—Substitute for Celluloid—Belgian Artificial Stone—Nettle Fiber in Germany—German Trade and Industry—German Emigration—Strikes in Germany—Diamonds in Amsterdam—Swiss Demand for American Coke—Ankylostomiasis in Coal Mines—Italian Showrooms in Port Said—Calico-Printing Trade Combination—Catalogues Free of Duty in Canada—Iron Bedsteads in Canada—Improved Steamship Service with Para—Quarantine in Brazil—Tariff on Corn in Venezuela—Rice Crop		

Page.

of Japan—Quay at St. Malo—Business Conditions in Christiania—Demand for Iron Theaters in Spain—American Corn in Russia—Duties in Zanzibar—Consular Reports Transmitted to Other Departments)..... 653

LXVII.—FOREIGN REPORTS AND PUBLICATIONS (Trade Openings in Syria—German Chemical Discoveries—Industries in the Transvaal—French Warehouse in Madrid—Iron Bedsteads in Turkey—Commercial Travelers in Brazil)..... 663

REPORTS BY COUNTRIES.

	Page.
AFRICA, SOUTH:	
Leather industry in Cape Colony	656
Trade notes from	646
ARABIA:	
Export of Mocha coffee to the United States	625
ARGENTINE REPUBLIC:	
The tasajo, or dried-beef, industry in the River Plata countries	575
AUSTRALIA:	
Constitution of the Commonwealth of	595
AUSTRALIA, SOUTH:	
Commercial fertilizers in	615
BELGIUM:	
Aphthous stomatitis	634
Ankylostomiasis in coal mines	658
Artificial stone in	655
Regulations for manufacture and sale of cheese	634
BRAZIL:	
Improved steamship service with Para	660
Quarantine in	660
Southern	571
CANADA:	
Agricultural possibilities in the Yukon territory	620
Catalogues free of duty in	659
Cranberry cultivation in	622
Iron bedsteads in	659
Suppressing the San José scale in	621
CHINA:	
Mining regulations in	590
Silkworms in	592
Tariff regulations of Kyao-chau	589
EGYPT:	
Italian showrooms in Port Said	658
ENGLAND:	
Calico-printing trade combination in	659
Cost of running automobiles	641
Plan to sell goods in Europe	635
FORMOSA:	
Export duty on teas in	588
FRANCE:	
Government advertising in	640
Inventions for preventing railway collisions	529
Quay at St. Malo	661
New French steamer	531
Precautions against tuberculosis	642
Proposed bridge across the Rance	526

FRANCE—Continued. Page.
Railway congress at Paris..... 651
Savings banks of..... 638
The grain situation in..... 633
GERMANY:
American iron in..... 524
American apples in..... 631
Emigration..... 656
Export of malt from Hamburg..... 629
Iron production in Europe and America..... 526
New canal in..... 523
Nettle fiber in..... 655
Parcels-post exchanges with..... 637
Sheep and wool in..... 632
Strikes in..... 657
Substitute for celluloid in..... 654
The international motor-carriage exposition at Berlin..... 517
Trade and industry of..... 656
Trusts in..... 636
GREAT BRITAIN:
American trade competition with..... 536
Excessive freight charges to..... 537
Shipping trust in..... 538
Trade notes from the Midlands..... 540
GUADELOUPE:
Demand for boilers, engines, etc., in..... 566
HAWAII:
Recent imports into..... 653
INDIA:
American railway machinery in..... 654
Railways of..... 560
Tramways in Bombay..... 561
ITALY:
Commerce of..... 525
JAPAN:
Market for wood pulp in..... 594
Regulations for new ports in..... 593
Rice crop of..... 661
MAURITIUS:
Taxation in: Bubonic plague..... 651
MEXICO:
Matches in..... 565
Street railways in Veracruz..... 562
Waterworks and sewerage in Tampico..... 563
NETHERLANDS:
Diamonds in..... 657
NEW CALEDONIA:
Development of..... 653
Shipping lines to..... 587
PARAGUAY:
Bleached cotton goods in..... 569
Openings for capital in..... 567
Textile plants in..... 570

	Page.
RUSSIA:	
American corn in	662
Extension of American trade in	555
Hop industry in 1898	628
New dredge in	543
SIBERIA:	
Lease of gold-bearing land in	553
SPAIN:	
Demand for iron theaters in	662
Electric tramways in northern	532
Steel roadway in	534
STRAITS SETTLEMENTS:	
Opening for capital in	584
Tin in	584
SUDAN:	
American bridge in	644
SWEDEN:	
Business conditions in Christiania	661
SWITZERLAND:	
Demand for American coke in	657
TRANSVAAL:	
Gold production, August, 1899	648
TURKEY:	
American commerce in	558
VENEZUELA:	
Tariff on corn in	661
WORLD:	
Coffee trade of the	623
Hop crop of, in 1899	626
ZANZIBAR:	
Duties in	662

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

The fact that the market exchange value of foreign coins differs in many instances from that given by the United States Treasury has been repeatedly called to the attention of the Bureau of Foreign Commerce. An explanation of the basis of the quarterly valuations was asked from the United States Director of the Mint, and under date of February 7, 1898, Mr. R. E. Preston makes the following statement:

"When a country has the single gold standard, the value of its standard coins is estimated to be that of the number of grains fine of gold in them, 480 grains being reckoned equivalent to $20.67 in United States gold, and a smaller number of grains in proportion. When a country has the double standard, but keeps its full legal-tender silver coins at par with gold, the coins of both gold and silver are calculated on the basis of the gold value.

"The value of the standard coins of countries with the single silver standard is calculated to be that of the average market value of the pure metal they contained during the three months preceding the date of the proclamation of their value in United States gold by the Secretary of the Treasury. The value of the gold coins of silver-standard countries is calculated at that of the pure gold they contain, just as if they had the single gold standard.

"These valuations are used in estimating the values of all foreign merchandise exported to the United States. The value of the Indian rupee, although calculated according to law at the value of the pure metal contained therein, has a commercial value above the value of the silver bullion; consequently the value for customs purposes is determined in each case by the consular certificates attached to the invoice of exports from that country to the United States."

The following statements, running from January 1, 1874, to October 1, 1899, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account

that the ruble of Russia, for instance, fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, 1882, and 1891–95 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz: (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
British Honduras.....	.....do	.....do	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso (60 cents).
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire; silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Uruguay	Gold	Peso.....	1.03,4	Gold—peso: silver—peso and divisions.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed.

† The gold standard was adopted October 1, 1892. (See CONSULAR REPORTS No. 147, p. 623.) Values are still, however, frequently expressed in the florin or gulden, which is worth 2 crowns or 40.6 cents.

‡ Gold standard adopted October 1, 1897. (See CONSULAR REPORTS No. 201, p. 259.)

§ See note to table of fluctuating currencies.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896-97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1896.				1897.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.49,1	$0.49,3	$0.49,7	$0.49	$0.47,4	$0.46,8	$0.44,3	$0.41,2
Central America.	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,5	.44,3	.41,2
China	Amoy tael				.79,3	.76,7	.75,7	.71,7	.66,4
	Canton tael				.79	.76,5	.75,5	.71,5	.66,4
	Chefoo tael	.75,9	.76,3	.76,9	.75,8	.73,3	.72,4	.68,6	.63,7
	Chinkiang tael				.77,4	.74,9	.73,9	.70	.65,1
	Fuchau tael				.73,3	.70,9	.70	.66,3	.61,6
	Haikwan tael	.80,8	.81,2	.81,9	.80,6	.78	.77	.73,1	.67,8
	Hankau tael				.74,2	.71,7	.70,8	.67,1	.62,3
	Ningpo tael				.76,2	.73,7	.72,8	.68,9	.64
	Niuchwang tael				.74,3	.71,9	.71	.67,2	.62,5
	Shanghai tael	.72,5	.72,9	.73,5	.72,4	.70	.69,1	.65,5	.60,8
	Swatow tael				.73,2	.70,8	.69,9	.66,2	.61,5
	Takao tael				.79,8	.77,2	.76,2	.72,2	.67
	Tientsin tael	.76,9	.77,3	.78	.76,8	.74,3	.73,4	.69,5	.64,6
Colombia	Silver peso	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Ecuador	do	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
India	Silver rupee	.23,3	.23,4	.23,6	.23,3	.22,5	.22,2	.21,1	.19,6
Japan	Silver yen	.52,9	.53,2	.53,2	.52,8	.51,1	.50,5		
Mexico	Silver dollar	.53,3	.53,6	.54	.53,2	.51,5	.50,8	.48,2	.44,6
Persia	Silver kran	.09	.09,1	.09,2	.09	.08,7	.08,6	.08,2	.07,6
Peru	Silver sol	.49,1	.49,3	.49,7	.49	.47,4	.46,8	.44,3	.41,2
Russia	Silver ruble	.39,3	.39,5	.39,8	.39,2	.37,9	.37,4		
Tripoli	Silver mahbub	.44,3	.44,5	.44,9	.44,2				

Countries.	Monetary unit.	1898.				1899.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.42,4	$0.40,9	$0.41,8	$0.43,6	$0.43,9	$0.43,4	$0.44,3	$0.43,6
Central America.	Silver peso	.41,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
China	Amoy tael	.68,5	.66,2	.67,6	.70,6	.71	.70,2	.71,6	.70,5
	Canton tael	.68,3	.66	.67,4	.70,4	.70,8	.70	.71,4	.70,3
	Chefoo tael	.65,5	.63,3	.64,6	.67,5	.67,9	.67,2	.68,4	.67,4
	Chinkiang tael	.66,9	.64,6	.66	.69	.69,3	.68,6	.69,9	.68,9
	Fuchau tael	.63,4	.61,2	.62,5	.65,3	.65,6	.65	.66,2	.65,2
	Haikwan tael	.69,7	.67,3	.68,8	.71,8	.72,2	.71,4	.72,8	.71,8
	Hankau tael	.64,1	.61,9	.63,2	.66	.66,4	.65,7	.67	.66
	Ningpo tael	.64,3	.63	.65	.67,9	.68,2	.67,5	.68,8	.67,8
	Niuchwang tael	.65,9	.62	.63,4	.66,2	.66,5	.65,9	.67,1	.66,1
	Shanghai tael	.62,6	.60,4	.61,7	.64,5	.64,8	.64,1	.65,4	.64,4
	Swatow tael	.63,3	.61,1	.62,4	.65,2	.65,5	.64,9	.66,1	.65,1
	Takao tael	.66	.66,6	.68	.71	.71,4	.70,7	.72	.71
	Tientsin tael	.66,4	.64,1	.65,5	.68,4	.68,8	.68	.69,4	.68,3
Colombia	Silver peso	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
Ecuador	do	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6
India*	Silver rupee	.20,1	.19,1	.19,9	.20,7	.20,8	.20,6	.21	.20,7
Mexico	Silver dollar	.46	.44,4	.45,4	.47,4	.47,7	.47,2	.48,1	.47,4
Persia	Silver kran	.07,8	.07,5	.07,7	.08	.08,1	.08	.08,2	.08
Peru	Silver sol	.42,4	.40,9	.41,8	.43,6	.43,9	.43,4	.44,3	.43,6

*The commercial value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Kwan	Japan	8.28 pounds.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castillan	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅘ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.417 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LXI. DECEMBER, 1899. No. 231.

THE INTERNATIONAL MOTOR-CARRIAGE EXPOSITION AT BERLIN.

The international exposition of motor vehicles for transport of freight and passengers was opened in the large military riding-school building known as the Exercier-Haus, in Karlstrasse, Berlin, on Sunday, the 3d of September, in presence of the Emperor and a large concourse of people, including many distinguished personages, eminent engineers, electricians, and manufacturers of machinery, and a full representation of the class which has recently taken up the automobile as a vehicle for purposes of recreation and sport.

The dedicatory address was made by State Secretary Lieutenant-General von Podbielski, honorary president of the society, and the exposition has had throughout the important advantage of direct recognition and support from the Imperial and Prussian Governments.

The exposition premises include two sections—the Exercier-Haus, with 2,700 square meters (29,106 square feet) of floor surface, where the carriages, materials, and fixtures on exhibition are displayed, and a large parade ground or barrack yard directly opposite, where, under a long tent, are kept the various motor carriages that have been in daily use for display and hire during the exhibition. It was part of the programme of the occasion that any exhibitor of a motor carriage might place one or more of the same class in service under charge of a subcommittee, to be run for exhibition about the inclosed grounds or let for hire at fixed rates within prescribed hours of each day to all comers, but under charge of a competent driver

furnished by the exhibitor. These carriages have been liberally patronized by the public, and on pleasant days have formed an interesting feature in the parks and city streets, where they are permitted to run at any speed not exceeding 12 miles an hour, a rate which has been frequently exceeded, but leniently permitted by the police.

The exhibition proper has been made by one hundred and twenty firms and companies, of whom eighty-one are German, four are Belgian, twelve French, and two from Switzerland. Not a single American or English maker is represented in his own name, although there are tires, driving chains, and other machine parts of English origin exhibited under the names of their German agents; and three of the most noticeable and admired electrical motor carriages on exhibition are from the works of the Pope Manufacturing Company, of Hartford, and exhibited by the Motorfahrzeug und Motoren-Fabrik, of Marienfelde, a suburb of Berlin, which firm has acquired certain patents of the American company.

As classified under the schedule previously announced, the exhibition includes forty different models and types of motor carriages for one passenger or more; thirteen exhibitors show motor wagons for freight; twenty-six numbers cover exhibits of motor cycles and trail carts belonging thereto; six firms exhibit motors and parts of the same; two show only springs and wheels for motor carriages; fifty-one firms exhibit various miscellaneous parts, fixtures, and materials for motor carriages not included in the preceding classes; and five exhibitors display the literature, drawings, maps, and models which the new science of automobilism has thus far developed.

In estimating the success of this exhibition, it is essential to remember that automobilism and the manufacture of motor vehicles are of comparatively recent birth in Germany. It is true that nearly all hydrocarbon motors, including the Daimler machine, are more or less direct variations and developments of the Otto gas engine, which is a German invention, and that the Benz Motorwagon Company, of Mannheim, was one of the pioneers in the construction of horseless carriages. But the industry has developed slowly, and the Central European Motor Carriage Association, under whose auspices this exposition has been held, was organized at Berlin as late as the 30th of September, 1897. In this respect Germany is in somewhat the same position as the United States—years behind France and distinctly later in the field than Belgium and England.

But this exhibition has revealed for the first time how vigorously German engineers and manufacturers have taken hold of the new industry. The dominant notes of the whole occasion are the displays made by the Daimler Company, of Cannstadt, which shows among other exhibits the first rude carriage ever constructed with

a Daimler motor, and by firms like Dürkopp, of Bielefeld, Kleyer and Opel, of Frankfort, and others who have hitherto been known only as manufacturers of bicycles. As the cycle trade has lagged through satiety, overproduction, and the competition of imported bicycles and parts, these men have turned their large and well-equipped factories in the new direction, with the result that the development of automobile manufacture has been phenomenally rapid and progressive. It is true that the German carriages are for the most part heavy and somewhat gaudy and crude in upholstery and decoration—they lack the lightness, grace of form, and quiet, good taste of the American and some of the best French machines—but on the whole they are substantial, speedy, and show many original and promising features.

The exhibition shows about the usual proportions of carriages propelled by electric and some form of hydrocarbon motor—oil, benzine, or gasoline. Large sales have been made, some of the different types having been sold as many as twenty times for future delivery; and it is noticed that for town or city use the electrical carriages have the preference among purchasers, while for country districts and freight and delivery wagons the benzine and gasoline motors have the call. This is the natural result of considerations which apply equally in all countries. The electrical carriage is more easily handled than those of the oil or benzine type; it is self-starting, free from smell, practically noiseless, and can be run at wide ranges of speed without the use of different gear wheels; it is good for 40 miles without recharging, which is quite sufficient for ordinary city, park, or suburban driving, and can be managed by a skillful amateur without the presence and help of a professional driver.

The hydrocarbon wagons are, on the other hand, cheaper; they require as source of power only a few quarts of benzine or gasoline that can be bought at any country store; and they can be run by any ordinary machinist, who need have no knowledge of electricity.

Until, therefore, electrical current can be far more widely and generally supplied than at present, the working radius of the electro-motor carriage must be restricted to the immediate neighborhood of cities and towns, and for long journeys or use in remote country districts the hydrocarbon motor must retain its original supremacy. It is the struggle to overcome or to measurably neutralize these restrictions which now principally engages inventors, and the present exposition has brought out two original and highly interesting devices, which, for the reason that they each mark a step in the direction that future progress must apparently follow, would seem to deserve a separate description. The problem in hand is to produce an electro-motor

carriage which shall be as nearly as possible self-sustaining and independent of recharging from a fixed supply.

The first of these novelties is the "Electra," a two-seated tricycle exhibited by A. Krüger, of No. 8 Spittel-Markt, Berlin. The frame is of steel tubes, the front guide wheel is moved by a handle within reach of the driver, the rear axle is discarded, and the driving wheels hung independently on each side. This gives full space beneath the seat for carrying the motor and a galvanic battery, which supplies a current of 2.5 volts per cell employed. The original feature of this machine, aside from its very clever condensed construction, is covered by imperial German patent No. 93427, under the title "Transportable electricity," and is concisely as follows:

A galvanic battery of about 2 feet in length and 18 inches in breadth and depth is arranged in cells with changeable electrodes, which can be inserted or removed at will. The negative electrodes are ordinary zinc plates; the positive are similarly plates of superoxid of lead, impregnated with an acid salt which is readily dissolved by water. These electrodes being in position, water is poured in, the acid salt is dissolved, the requisite elements of galvanic action are thus completed, and a current is immediately developed, which, being turned into the motor, starts the machine.

When the positive plates are exhausted by consumption of the acid, they can be removed, the spent solution discharged, fresh plates inserted, water again poured in, and the current restored. The vehicle, with its cells filled and carrying fresh electrodes for a run of 60 kilometers (about 40 miles), weighs only 180 kilograms (378 pounds), and its inventor claims for it a radius of 100 kilometers (62.1376 miles) with plates that can readily be carried in its present space.

The bed of the vehicle is so constructed that the battery and motor, with the supply of extra plates, rest on a special set of springs and do not communicate any oscillatory motion to the seat. The motion drives the carriage forward or backward at will and is managed by a single crank set vertically in front of the center of the seat. This invention has been an object of especial interest during the exposition; but when tested and explained before the committee of award an accident happened by which the positive electrodes, being overcharged with acid, developed an excess of current which became for the moment difficult to control, so that the machine made an unfortunate impression at a critical moment and received only a bronze medal. While unquestionably ingenious and original in many of its features, it may be fairly doubted whether this or any other vehicle depending for its current supply upon a galvanic battery will meet the requirements of the future. No one can yet say,

of course, that the capacities of such a battery have been fully developed; and until this is done the invention of Mr. Krüger will doubtless form the starting point for further interesting experiment and research.

The second novelty which may fairly be said to have formed the central feature of the exposition is a combined electro and benzine motor carriage from the works of the Pieper Company, at Liege, Belgium. In this, the problem of making an electro-motor carriage self-sustaining and independent of charging from an outside source has been apparently mastered, although the device as a whole is of recent invention and will doubtless undergo important future improvement.

It is called the Pieper double-motor carriage, and, so far as the circulars show, is not patented. Stripped of technicalities, this carriage may be described as follows:

The wheels and tubular frame are of the ordinary type, except that the front and rear axles are connected by two strong, rigid steel braces on which rest the electrical motor, accumulator, and the device for regulating the speed. A benzine motor rests on springs over the front axle and turns the main shaft, which extends backward through the electrical motor and connects by mitered gearing with the rear axle that connects the driving wheels. There is thus a benzine and an electrical motor geared to the same driving shaft, and the kernel of this combination is that both can be worked at the same time or either thrown out and the other left in action at the will of the driver.

The accumulator can be charged in the usual manner by current from an ordinary lighting-power plant, and, when used in cities, the vehicle would be used as an electro-motor carriage with all the advantages of that system. But on a long journey or remote from outside electrical supply, the benzine motor is not only sufficient to propel the carriage, but, by running the electrical motor as a dynamo or generator, recharges the accumulator.

In the carriage on exhibition, the electric motor is of 2½ horsepower, the accumulator weighs 125 pounds, and the benzine motor develops 3 to 3½ horsepower; so that when both are in action in climbing a steep hill or traversing a heavy road, the driver has 6 horsepower at command, which is ample for all contingencies. On level, easy road or whenever the load falls below the maximum power exerted by the benzine motor, the electric motor changes automatically to a dynamo and the surplus force is converted into current. In running down hill or in stopping the carriage, the momentum of the vehicle is received by the electric motor acting as a rheostat and stored as electricity in the accumulator, which is thus in an ordinary

journey kept constantly charged, or, if exhausted, can readily be recharged by running the generator with the motor when the carriage is at rest. A New Jersey ampère meter, set in front of the driver as in the Columbia carriages, indicates the state of the accumulator, and the change of the electrical machine from motor to generator and conversely is automatic, without any touch or attention from the driver.

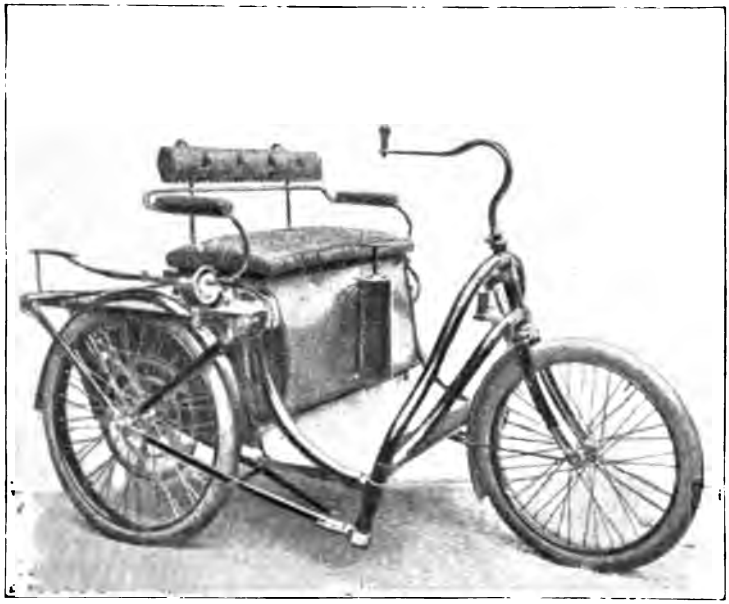
Thus constructed, this carriage shows high speed, easy control, great elasticity, and other essential qualities which are aimed at in motor-carriage construction. Its working parts are all hermetically sheathed, and, notwithstanding its two motors, it is lighter, both in fact and appearance, than most electrical carriages. None of its machinery is carried beneath the seat; all is borne upon the running gear below, and the weight of the spirit motor is far more than compensated by the comparative lightness and small size of its accumulator. That it is a perfect, or anywhere near a perfect, machine, no one, probably not even its inventor, would claim. But it apparently marks a definite step in the direction which future progress will be likely to take, and is therefore entitled to the interest which it has excited and the gold medal which it has won in the present exhibition. It is sold at retail in the form of an open, double-seated wagon, known in America as a "runabout," for $1,190; but so great is the demand that no delivery can be guaranteed under less than six months.

The German section of the exposition has been especially strong in respect to omnibuses, cabs, freight and delivery wagons, with both electrical and hydrocarbon motors of several types, and for the convenient reference of American makers illustrations of several vehicles of these classes are appended as exhibits with this report.

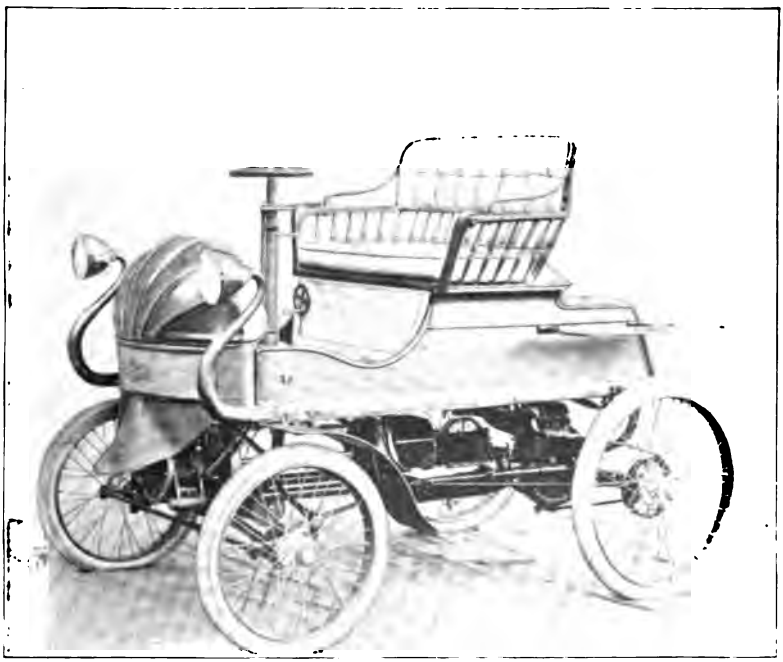
Especially notable is the omnibus made by the Union Electrical Company, of Berlin (whose works are at Marienfelde), and which is an example of a large number which will be put in service on Friedrichstrasse and other principal lines in this city.

The first of these vehicles went into service on the 1st of the present month, and was from the beginning so popular that its twenty-eight places are constantly filled, and the hope is generally expressed that carriages of this type may eventually replace entirely the two-horse omnibuses which have survived the introduction of street railways, and which, for the reason that their fares are but half those of the electrical and horse tramways, still carry more than a million of passengers every year. The new omnibuses are of 4 horsepower, are perfectly manageable, run swiftly and silently over the asphalt streets, and seem to fulfill every expectation.

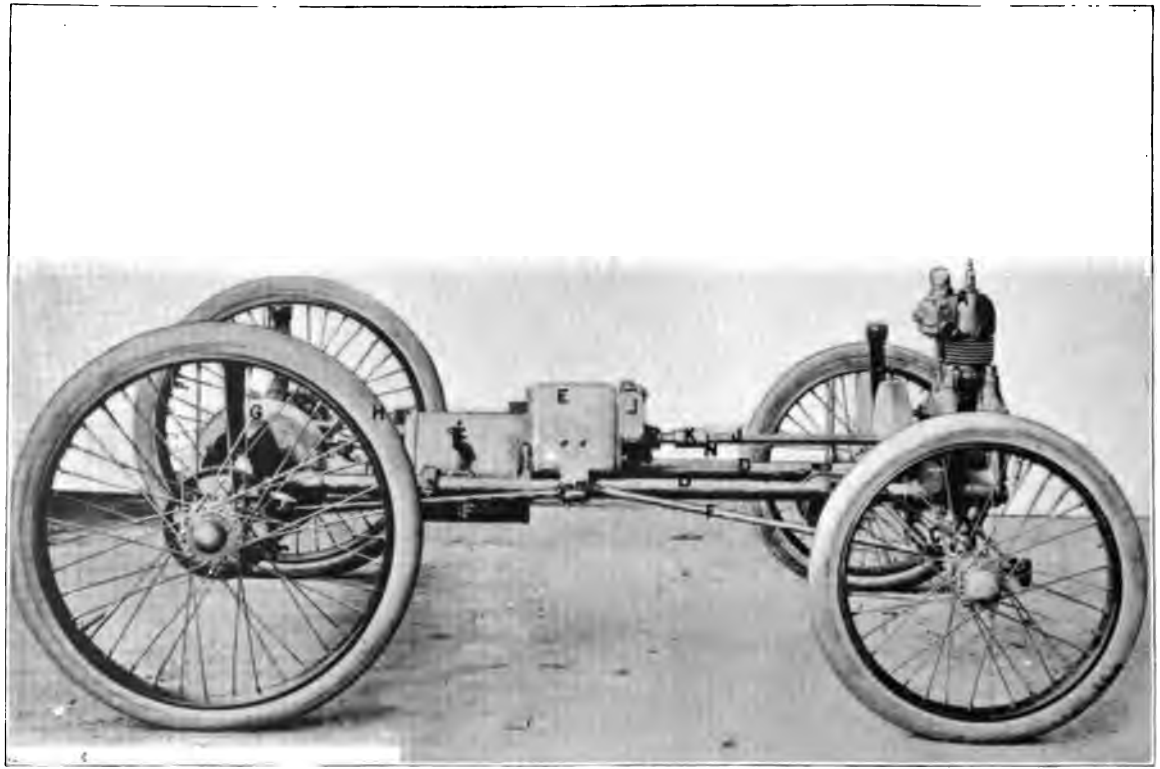
Benzine and electro motor delivery wagons for dry-goods stores,



THE "ELECTRA" (RETAIL PRICE 3,000 MARKS=$1,014).



PIEPER DOUBLE-MOTOR CARRIAGE.

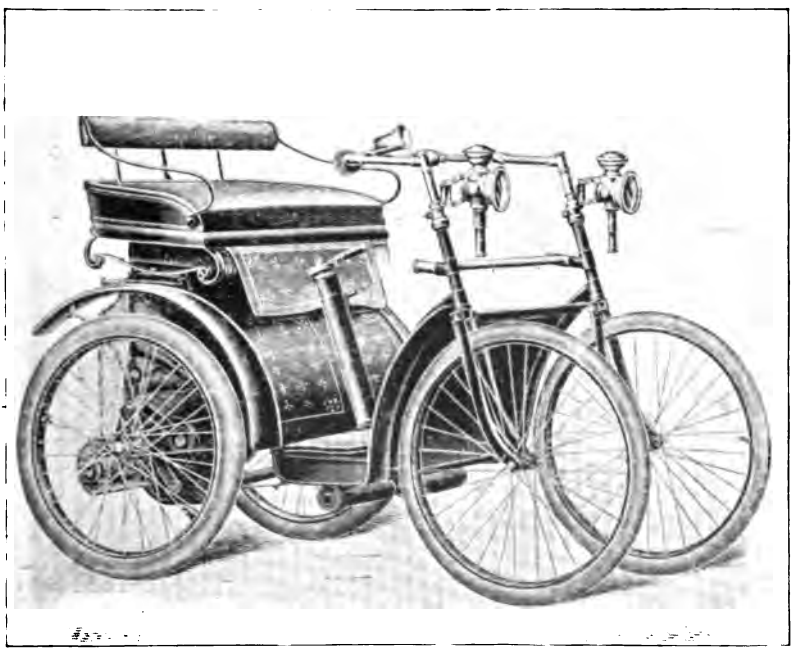


THE PIEPER DOUBLE-MOTOR CARRIAGE, FROM LIEGE, BELGIUM.

ELECTRICAL OMNIBUS, MADE BY THE UNION ELECTRICAL COMPANY AT MARIENFELDE, AND NOW IN SERVICE AT BERLIN.

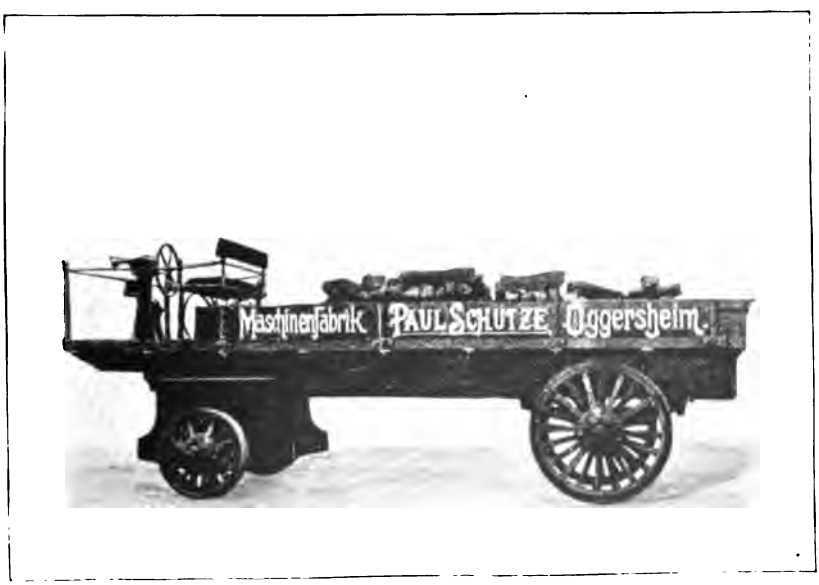
BENZINE-MOTOR TRICYLE; USED ALSO WITH TRAIL CART. FROM HEINRICH KLEYER, FRANKFORT-ON-MAIN.

ELECTRIC VICTORIA, BLADIK, GRUNEWALDT & CO., BERLIN.



AUTOMOBILE (SYSTEM LOUTZKY), 49 FRANZÖSISCHE STREET, BERLIN.

FREIGHT WAGON, DAIMLER SYSTEM, BY DAIMLER & CO., CANNSTADT.



ELECTRIC FREIGHT WAGON, BY PAUL SCHÜTZE, OGGERSHEIM, BAVARIA.

groceries, breweries, and wine stores are already in use in Berlin, and, although at first objected to because of their tendency to frighten horses, are now accepted as part of the new equipment which will finally, for reasons of economy, cleanliness, and general efficiency, eliminate horses from city travel and transport. Two heavy freight wagons—one of the Daimler-motor system, with 12 horsepower and 12 tons burden, and another of 10 tons burden, with electric motor, made by Paul Schütze at Oggersheim, Bavaria—are included among the illustrations transmitted with this report.

The French section of the exposition includes large exhibits from Falconnet, Perrodeaud et Cie., Gianelli et Lacoste, Vital-Bouhours, and Leon Lefebre, whose products are standard in France and are comparatively well known in the United States. Their motors are either electrical or of the Dion benzine type, and many of the carriages still retain the chain gear, a device which is here considered obsolete except for freight and delivery wagons.

Three trials of speed were among the prescribed features. The first, from Berlin to Baumgarten Bridge and return, 65 kilometers (40.4 miles), on the 12th of September, was won by an Astor tricycle driven by Broca, in one hundred minutes and thirty seconds, although the winner lost some time through having been shut off at railway crossings.

The second race, from Berlin to Dresden and return, 192 kilometers (119 miles), was fixed for Sunday, September 17, but was more or less deranged by heavy, persistent rains.

The third race, from Berlin to Munich, via Magdeburg, Cassel, Frankfort, Stuttgart, and Augsburg, 1,010 kilometers (628 miles), started at noon to-day.

FRANK H. MASON,
Consul-General.

BERLIN, *September 28, 1899.*

NEW GERMAN CANAL.

About two years ago, the city of Leipzig selected two royal commissioners of public buildings—Messrs. Haverstadt and Contag—to prepare plans for a canal between Riesa and Leipzig, navigable for large vessels, and granted the sum of 10,000 marks ($2,380) to defray the expenses incurred in connection therewith. The plans, after careful, conscientious work, are now ready, and, together with the estimates of the general and special costs, are in the hands of the Leipzig city council.

The canal will be 67.5 kilometers (nearly 42 miles) in length, built entirely on Saxon territory, and will in no way conflict with foreign state interests.

Not only do the industrial people of Leipzig take a great interest in this project, but the commercial classes all over Saxony are anxious to have it carried out.

It is estimated that the cost of building this canal will be higher than that of other canals of about the same length. This is principally on account of the difficulty which will be encountered in getting over the watershed. The cost of the ground, ground and slope work, road and railway crossings, lifting work, water feeding, etc., will amount to 38,000,000 marks ($9,044,000). The cost of the harbor in Leipzig will amount to 9,000,000 marks ($2,142,000) alone, and to connect the canal with the Pleisse another 3,500,000 marks ($831,000) will be necessary.

One thing worthy of note in comparing this plan with others made in the past is that this proposed canal will be located entirely on Saxon territory, and for this reason can be built with the cooperation of the Saxon Government and the city of Leipzig.

This project indicates Saxony's interest in helping its commercial and industrial people. Riesa is the grain center of this Kingdom, Leipzig its richest city. The latter for a long time has been the center of an enormous trade, largely due to its fairs, which occur twice each year—one in April and the other in September.

BRAINARD H. WARNER, Jr.,
Consul.

LEIPZIG, *August 31, 1899.*

AMERICAN IRON IN GERMANY.

When, some time ago, American competition in iron and steel was talked of in the German press, many of the technical and trade journals made light of the news. Quite different, however, is the expert opinion of the Chamber of Commerce of Bochum, which comprises leading manufacturers from this prominent iron and steel district of Germany. In its annual report for 1898, this body speaks as follows:

American competition, which in 1897 arose in the continental markets, has made further progress during 1898. Pig iron exported to Germany has increased 16 per cent as compared with the imports of the year previous, fine cast iron and wrought iron 28 per cent, and common ironware 75 per cent, while the import of bicycles and parts gained 106 per cent.

The value of these American articles imported into Germany in 1897 amounted to 10,100,000 marks ($2,380,000); in 1898, to 15,800,000 marks ($3,570,000). This extraordinary increase in so short a time gives cause for very serious concern, especially when it is considered that the demand in the United States has advanced enormously, so that no large stocks were available for foreign export.

Consequently, we have to reckon with certainty that the import of American iron and steel will continue to increase; to prevent it will require strenuous exertions

on the part of German works. Above all, we must have lower freight rates. Without these it will be impossible for the Rhenish Prussian iron manufacturers to compete in future with American goods, which gain great advantage from the astoundingly low rates of railroad freights.

SIMON W. HANAUER,
FRANKFORT, *September 9, 1899.* *Vice-Consul-General.*

COMMERCE OF ITALY.

German papers are publishing extracts from a report recently made by Italy's Minister of Finance, covering Italy's exports and imports.

Imports, in the first half of 1899, fell off from 741,000,000 lire ($143,013,000) to 718,000,000 lire ($138,574,000), a drop of 23,000,000 lire ($4,439,000). This, however, indicates healthy conditions. During this period, Italy imported 111,000,000 lire ($21,423,000) less grain than during the same period of 1898. Her last harvest was good; the one previous poor.

The lists of imports and exports, when examined, tell a tale of prosperity long unprecedented in Italian history. The importation of raw materials for manufacturing purposes—coal, wood, tobacco leaves, cocoons, raw silk, wool, iron, and steel—increased 71,000,000 lire ($13,703,000). The raw-material exports went up 10,000,000 lire ($1,930,000); manufactured articles, 15,000,000 lire ($2,895,000). Strange to say, at a time when the whole world is working to enlarge and improve its shipbuilding plants, Italy's fell off 7,500,000 lire ($1,447,500). The total exports in the first six months of 1899 were 624,000,000 lire ($120,432,000), against 573,000,000 lire ($110,589,000) for the first six months of 1898, or a gain of 51,000,000 lire ($9,843,000).

Efforts are being made to increase Italian shipments to Germany. An Italian chamber of commerce for Berlin is talked of, to do the same kind of work as those in Paris, Buenos Ayres, etc.; also the question of attaching a commercial expert to the Italian embassy in Berlin. A cooperative company in Milan has planned establishments to sell Italian wines, fruits, etc., in railroad stations all over this Empire. Germany is one of Italy's best customers. She buys tropical fruits and plants, wines, grapes, fruits, cauliflowers, potatoes, poultry, eggs, etc. Germany's exports to Italy are handicapped by high duties. The commercial treaty of 1891, writers here say, did little to lighten the burdens on Germany's exports, while the new commercial treaty with France allowed a 36 per cent increase in French exports to Italy.

J. C. MONAGHAN,
CHEMNITZ, *September 16, 1899.* *Consul.*

IRON PRODUCTION IN EUROPE AND AMERICA.

The production of raw iron in Germany, England, and the United States is interesting the industrial centers of this Empire. The most important industry of Germany, after coal mining, is iron working. While for certain purposes iron comes in from Scandinavia, England, and other foreign parts, most of that used in this Empire is dug from its own mines.

Production of raw iron.

Year.	Germany.	England.	United States.
	Tons.	*Tons.*	*Tons.*
1872	1,988	6,890	2,589
1876	1,846	6,661	1,899
1886	3,529	7,122	5.774
1891	4,641	7,523	8,412
1896	6,373	8,798	8,761
1897	6,882	8,937	9,807
1898	7,216	.....	11,962

These figures furnish an interesting array of facts. They tell a tale of prosperity and progress in Germany and the United States unprecedented in the history of industrial effort. England, which formerly led both the other countries, is now far behind the United States, and is having all she can do to hold her own against Germany.

"It is well known," says a German writer, "that American methods are so highly developed as to put the iron people there in a position to compete with England and Germany, not only in international markets, but in London, Liverpool, Glasgow, Belfast, Hamburg, and Berlin."

J. C. MONAGHAN,
Consul.

CHEMNITZ, *September 15, 1899.*

PROPOSED BRIDGE ACROSS THE RANCE, FRANCE.*

Although the building of a bridge across the River Rance, connecting the towns of St. Malo, St. Servan, and Dinard, in the Department of Ille-et-Vilaine, has been discussed for almost sixty years, a definite decision has not yet been reached. This may be attributed to two specific causes or conditions. The first is that, on account of the width of the river, the project is a colossal one; and the second

*This report was made in response to inquiries by a resident of New Jersey, to whom Advance Sheets have been sent.

is that the construction at present depends upon the formation of a joint-stock company with sufficient capital to execute the work. In other words, the bridge would be built neither by the municipalities of St. Malo, St. Servan, or Dinard, nor by the French Government; though it is possible that both the Government and the Department in which the above-mentioned towns are situated would contribute toward its completion, if once actually begun.

The first plans for a bridge across the Rance were designed by a French engineer named Bartel, who died about twenty years ago. This design was for a single span of 500 meters (1,640 feet); estimated cost, 12,000,000 francs ($2,316,000). Since then, the French Government has studied the question of building the bridge at its own expense. Plans were drawn up for a structure with several spans to be used by pedestrians and a railroad, to cost 10,000,000 francs ($1,930,000), but nothing ever came of the project. In 1894, Mr. Bersihand and Mr. Arnodin, well-known French bridge constructors, having been granted a concession by the French Government and the legislature (conseil général) of the Department of Ille-et-Vilaine, formed a company to build a bridge across the Rance at Bizeux, some 3 miles up the river from St. Malo, upon plans furnished by the latter. This bridge was to be for the use of pedestrians, carriages, and a tramway, and was to cost 5,000,000 francs ($965,000).

Mr. Bersihand having died recently, the company fell through, and there is a lawsuit pending between his heirs and Mr. Arnodin to determine the individual ownership of the rights of the concession.

As the plans of Arnodin were the results of an elaborate and careful study of the whole situation and were accepted by the Government and the authorities of the Department of Ille-et-Vilaine, and very possibly will be used by any company which may be formed in the future, some information concerning them will be of interest.

Mr. Arnodin's project was to construct a rigid metallic suspension bridge with movable and interchangeable parts across the Rance, from the rocky promontory of La Vicomte to the opposite shore. The bridge was to be 1,081.5 meters (3,548 feet) in length—that is, twice as long as the Brooklyn Bridge—have four granite pillars and five spans. The two central pillars would be built on the rocky island of Bizeux, in midstream, and the other two on solid rock, uncovered at low tide, at either side of the river. The length of the span between the two central pillars would be 137.5 meters (434.5 feet); from each of these pillars to either shore, 375 meters (1,063.7 feet); and the shore span on the St. Servan side would be 100 meters (328.08 feet) and on the Vicomte side 94 meters (308.4 feet).

The width of the bridge would be in the clear 5.9 meters (19.36 feet), with a roadway in the center 4.5 meters (14.78 feet) wide for carriages and tramway and a foot walk on either side 0.7 meter (2.38 feet) wide.

Independently of its own weight, the bridge should be able to support a surcharge of dead weight of 200 kilograms (440.8 pounds) per superficial meter of the roadway, footpaths included, which would represent a surcharge of 442,500 kilograms (487.7 tons) for each of the larger spans.

In that which relates to the moving weights, all the parts of the roadway should be able with safety to sustain wagons carrying 11 tons on two wheels. As the roadway would be wide enough to allow two such wagons to pass each other, the weight to be sustained would actually be 22 tons.

As to the stability of the bridge, provisions were made in the plans for a pressure of 270 kilograms per square meter (595 pounds per 10.76 square feet) of surface directly exposed, without any of the parts being strained, although it is very seldom that such a pressure would be exerted.

Of the total amount of money required for the enterprise, it is expected that the French Government would contribute 1,000,000 francs ($193,000), in view of the utility of the bridge for the movement of troops in case of war, and the Department of Ille-et-Vilaine 500,000 francs ($96,500). Neither the Government nor the Department has agreed to give this, or in fact any sum of money, toward the construction of the bridge; but it is presumed that both would vote amounts approximate to the above.

Dividends to stockholders would be paid by the collection of a toll of 10 centimes (1.93 cents) for every pedestrian, 1 franc (19.3 cents) for every carriage or vehicle, while an annual tariff would be received from the line of traction cars.

It is urged by those who have successively interested themselves in the project that the chief utility of the bridge would lie in the fact that it would serve as a means of communication between more than forty communes or townships, and thereby facilitate not only the transport of merchandise and farm products from one side of the river to the other, but render travel and traffic more rapid and less difficult than it is at present, when the estuary has to be crossed by a ferry.

Mr. Arnodin's company having virtually fallen through, the project, in either the same or a modified form, is being kept alive by a Mr. Georges Parant, proprietor of an iron foundry at Sedan.

Those whose position enables them to form an unprejudiced, if not an accurate, opinion of the scheme are disposed to think that the laying of the corner stone of this bridge is very remote. Its

commencement is entirely dependent upon the formation of a stock company, and until such a company is organized there is no corporation, individual, or body to whom bids for the contract may or might be submitted. I shall, however, inform the Department in ample time should any important developments transpire.

Any bridge across the Rance which may be erected in the future would have to satisfy the following conditions of the Secretary of the Navy:

(1) The bridge should have a span of at least 100 meters (328 feet) over the deepest part of the channel.

(2) This span, whether it is movable or fixed, at every stage of the tide, should allow the passage of the tallest military masts of war vessels, royal and top-gallant masts lowered.

In case the span should be immovable, the clear distance above the level of the highest tides should not be less than 38 meters (124.64 feet), a height corresponding to that of the highest masts of any French war ships, taking into consideration the swell of the sea which may be produced at the time of passing under the bridge.

(3) The Department of Ille-et-Vilaine must agree to maintain the depth of channel now existing, in case shoals should be formed in consequence of any work relating to the construction of the bridge.

As to the cost of French bridge work in comparison with American, I may say that, in view of the rise of 30 per cent in the iron market of France, and the fact that Americans are outdoing English contractors on the latters' territory, it is highly probable that contracts of this nature could be readily secured. A personal survey of the ground by those making bids, however, is absolutely necessary.

A. M. THACKARA,
Consul.

HAVRE, *September 28, 1899.*

INVENTION FOR PREVENTING RAILWAY COLLISIONS.

The fact that the United States is the most profitable field for the exploitation of useful inventions has taken a firm hold upon the inventive minds of other countries, and the first thing a man does who has a novel idea of any sort is to seek to have it patented in the United States. That this is especially true of inventions pertaining to railway appliances is only natural, when one contemplates the fact that the United States, with its 183,000 miles of railway track, has six times the mileage of any other country in the world.

French inventions are usually defective in the mechanical character of the means by which the end sought to be effected is attained.

This is, no doubt, due to the fact that so small a proportion of the population have any practical mechanical knowledge. Almost every man in the United States knows the use of tools. Very many who have no manual occupation are fairly skilled workers, and those who have inventive tendencies are not ashamed to devote their leisure time to the acquirement of technical skill necessary to prepare their working models and perfect their inventions. In France, on the contrary, such knowledge is considered derogatory to anyone in the higher walks of life. A clerk will not close a shutter nor dust off the top of the desk at which he works, since that is the business of an "ouvrier;" nor will a man who moves in good society permit himself to be seen carrying a package of any sort along the street.

One result of this exclusive use of tools by laborers is that French invention usually has, to an American, a certain sense of awkwardness in its mechanical application. The idea may be a good one, but there is very seldom any of the handiness which one finds in an American invention. In the many cases of application for American patents which come before me, I am almost always struck by this lack of directness of application, which leaves them open to competition, thus destroying the value of the invention by improvement of application of a principle.

This does not apply to an invention by M. Pierre Paul Guibert, of Millau, Department of Aveyron, France, intended to prevent railway collisions. It is, in effect, a simple and natural application of the "block system;" but, instead of merely displaying a signal at each end of a section of track showing that the same is occupied, M. Guibert's system acts also on the engines of the approaching locomotives and, by cutting off steam automatically, brings the train to a standstill.

As a preventative of head-on collision this invention would seem a positive improvement on the block system, though it is quite possible that the increased cost of installation may prevent its general adoption. I send inclosed a set of drawings and a copy of the specifications for his patent,* which M. Guibert was kind enough to send me. Whether his system is of practical importance or not, it serves to show how the United States is regarded by the inventors of Europe, who make haste to secure protection under our law so as to take advantage of the wonderful market it opens to really meritorious devices.

ALBION W. TOURGÉE,

BORDEAUX, *September 7, 1899.* *Consul.*

* Filed for reference in Bureau of Foreign Commerce.

NEW FRENCH STEAMER.

Mr. Thomas Sankey, United States consular agent at the port of St. Nazaire, furnishes information regarding the recent launching of a large French passenger steamer. He says:

An interesting event in shipping annals took place here yesterday—the launch of the steamship *La Lorraine* by the Compagnie Générale Transatlantique for the line from Havre to New York. *La Lorraine* is the largest French merchant steamer afloat; total length, 177 meters (578.8 feet); breadth, 18.2 meters (59.7 feet); depth to keel, 12 meters (39.4 feet). The ship was built under the direction of the Bureau Veritas and is of steel, with the upper parts of especially hard steel to secure rigidity. There are five decks and a promenade deck 100 meters ($328\frac{1}{12}$ feet) long for the first and second class passengers. The lifeboats, eighteen in number, are placed on the promenade deck, as well as rafts. There are fifteen water-tight bulkheads, a longitudinal bulkhead between the two engines, and a double-bottom ballast tank of a capacity of 1,100 cubic meters (38,842 cubic feet). There are two twin-screw, triple-expansion engines, each with four cylinders in juxtaposition, with distribution by Stephenson's slides and cranks with counterweights to lessen the vibration. The force will be 22,000 horsepower. All the auxiliary engines will be entirely independent of the principal ones. The distilling apparatus consists of sixteen simple cylindrical boilers, each with four fire boxes. The pressure will be 11.5 kilograms to the square centimeter. The bunkers have a capacity of 3,000 tons. The space set aside for the engines and bunkers is 58 per cent of the steamer. The first and second class passengers will be lodged in two large deck houses, between the first and second decks. Second-class passengers will occupy space aft. The rest of the space between decks amidships will be reserved for first-class cabins, ladies' boudoirs, bathrooms, barber shops, etc. The children's dining room will also be in this part of the ship. The deck house will contain the first-class dining room, which, for the emergency of bad weather, is provided with a system of electric ventilators. Above the dining room are the saloon and library. The ship will carry 59 passengers in the cabins de luxe, 378 first-class, 118 second-class, 398 third-class passengers; total, 953. The crew will consist of 22 officers, 170 men, and 180 attendants. The ship is expected to steam 22 knots. In the event of war, it will be used by the French Government as an auxiliary cruiser, and would be armed with nine

guns (six quick firing) of 138 millimeters (5.4 inches) and eight cannon revolvers. The keel of the boat was laid in July, 1898, and the cost is estimated at 12,000,000 francs ($2,316,000). The ship is expected to be ready for service April 1, 1900. A sister ship—*La Savoie*—is on the stocks and will be launched next March.

JOSEPH I. BRITTAIN,
NANTES, *September 25, 1899.* *Consul.*

ELECTRIC TRAMWAYS IN NORTHERN SPAIN.

Until a year ago, such a thing as an electric car was unknown in Spain. The cars in a few principal towns that could boast of having tramways of any kind were drawn through the streets at a jog-trot pace by horses or, more frequently, mules.

Within the last few months, however, foreign enterprise has been the means of inaugurating electric traction in the streets of Madrid, Barcelona, Valencia, Bilbao, and San Sebastian, and the lead thus taken by the principal tramway companies in the chief cities of Spain is likely to be quickly followed by others. It appears to me, therefore, that the present moment is particularly opportune for our makers of electrical plant, steam engines, boilers, rails, wire, etc., to come forward with tenders for the supply of such materials.

The following particulars regarding the most important tramway companies in the north of Spain may prove of interest to any firms desirous of soliciting orders from abroad, and I shall be glad to endeavor to supplement these general remarks by more precise information on any given point of special interest to our exporters or manufacturers.

BARCELONA.

Compañia Anonima de Tranvias de Barcelona.—This company, whose present manager is Mr. J. Kennedy, was the pioneer of tramway enterprise in Spain, having first started running its horse cars through the principal streets of Barcelona about twenty-five years ago, with a ninety-nine years' concession from the municipality. The system was changed to electric power in May last, and Dickinson's overhead trolley is used. This company at present owns eighty-five motor cars besides its old horse cars, but the latter will be superseded by other motor cars when the lines are all in working order. All the new plant required was supplied by a firm of English contractors. The cars were built in Barcelona; the engines and boilers for generating the motive power, dynamos, and fittings for the cars were purchased in the United States; and the rails in Belgium. The fares

charged are low, 10 centimos (1½ cents) being the fare for a run of 5 or 6 miles. The cars are well patronized, and the company is in a flourishing condition, with a capital given at 15,000,000 pesetas ($2,400,000), subscribed for almost exclusively in England. This road has a mileage of about 12 miles through the most frequented streets of the city.

Compañia de Tranvias de Barcelona à San Andres.—This concern about five months since changed hands, and now, under the able management of a Belgian engineer—Mr. Oscar Schmidt-Corr—is about to effect several important improvements. The traction is to be altered from steam to electricity, and the line prolonged from its present terminus at the outlying township of San Andres, 5 miles distant, to the manufacturing town of Sabodell, which lies 15 miles north of Barcelona. Another branch line is to be built from Barcelona to Horta, about 5 miles. The present subscribed capital of this company is given as 3,250,000 pesetas ($520,000).

Compañia de Tranvias de Barcelona à Sans.—This company has a line running from the center of Barcelona to the suburb of Sans, a distance of about 3 miles. The cars are at present drawn by mules, but the company has asked permission from the town authorities to use electricity as motive power. The capital of this company is 3,000,000 pesetas ($470,000). Manager, Mr. Francisco Esdeve.

Compañia de Tranvias de Barcelona à Badalona.—This line of steam tramways connects Barcelona with the neighboring town of Badalona, a distance of about 6 miles, the rails being laid along the high road. I have been unable to ascertain whether or not this company intends changing its motive power. The capital of the company as given is 2,000,000 pesetas ($320,000). Manager, Mr. F. Gillis.

Compañia General de Tranvias.—This road has a mileage of about 4 miles between Barcelona and the suburb of Sarria. Trains of four cars are drawn by powerful steam locomotives, which are rendered necessary owing to the sharp curves and steep gradients in the narrow streets of Sarria. I am informed that electric power on this road is soon to supersede steam.

In connection with the tramways of Barcelona, I should mention a small railroad company called the Ferrocarril de Barcelona à Sarria, the only double-track railroad in Spain, about 3 miles in length, with a capital of 3,000,000 pesetas ($470,000), that has also recently applied for permission to adopt electricity as its motive power in the place of steam.

SAN SEBASTIAN.

Compañia del Tranvia Electrico de San Sebastian.—The president is D. Antanasio Osacar; manager, M. L. Carlier. This electric road runs for a distance of about 5 miles through the town of Pasages.

which is the commercial port for San Sebastian, as far as the small manufacturing town of Rentiri. All the electrical plant was supplied by La Compagnie Générale d'Electricité, of Geneva, Switzerland. The cars were made in Saragossa, Spain.

BILBAO.

There is only one tramway company in Bilbao, which runs two lines with an aggregate mileage of about 19 miles. The motive power is electricity. During last year, 2,700,000 passengers were carried; but, as the service is being improved and increased, a better result is looked for this year. The capital of this company is 4,500,000 pesetas ($725,000).

VALENCIA.

All the city and suburban tramways in Valencia have been bought up by a French company. The plant is now being erected to run the cars by electricity, but the contracts have all been placed with French firms.

There are a few other tramways and railroads in the Province of Catalonia, particulars about which I have not yet been able to obtain. The foregoing remarks will, however, serve to show that there is undoubtedly a market in Spain for American electrical equipment.

If our manufacturers and street-railway journals will send me their names and addresses, I shall be glad to furnish them with the names of the chief contractors of all new companies, when they are formed for building tramway lines, and information regarding any movement toward the purchase of electrical supplies by the older ones.

JULIUS G. LAY,
Consul-General.

BARCELONA, *October 3, 1899.*

STEEL ROADWAY IN SPAIN.*

The road between Valencia and Grao is 2 miles in length, and an average of 3,200 vehicles pass over it daily. Until 1892, it was constructed of flint stone. The annual cost of keeping it in repair was about 35,000 pesetas. At the rate of exchange at that date, this amounted to $5,470.

The construction of a steel roadway was determined on, and the annual cost of keeping in repair the central zone of road thus relieved from heavy traffic—which proceeds over the steel rails—is now only 2,500 pesetas, or about $380 at the present rate of exchange.

* This report was made in answer to an instruction sent at the request of the Department of Agriculture, to which Advance Sheets have been sent. See also "Steel-plate roadway in Great Britain," CONSULAR REPORTS No. 230 (November, 1899), p. 495.

A Belgian firm received the contract to furnish the steel work, having bid less than Spanish firms at Barcelona and Bilbao.

The length of road so built is 3.2 kilometers (1.988 miles). The cost per kilometer (0.62137 mile) was 44,100 pesetas ($6,890).

The total cost of the road laid was 60,950 pesetas ($9,506). The expense in detail was:

	Pesetas.	
Steel construction	44, 100	=$6, 890
Transportation and laying steel construction	3, 250	= 507
Binding-stone construction between rails and lateral zones	13, 600	= 2, 109
Total	60, 950	= 9, 506

The rails, during the seven years they have been in position, exhibit a wear of one decimal of a millimeter yearly, and have not required repairing.

Ample room is allowed between the rails for two horses to walk abreast. Horses do not appear to slip on rails of this construction.

At each side of the rail are layers of binding stones, the paved road being higher than the face of the rails.

The municipality of Valencia is of opinion that the saving in cost of repairs, through a road of this description, pays for its construction in a short time, and other and similar roadways are in contemplation.

From various parts of Spain, inquiries have been made concerning this road. I learn that a similar construction was decided on at Alicante, in 1898, but was temporarily abandoned when events caused exchange to increase.

A toll of (about) eight-tenths of a cent is charged each vehicle passing over this roadway.

A fuller description would have been furnished had it not been believed that the technically accurate working plans transmitted herewith* would themselves prove of much greater information than unprofessional statements.

I am indebted to the mayor of Valencia and to Señor Mesegner, municipal architect, who invented the road, for copies of these plans.

HORACE LEE WASHINGTON,

VALENCIA, *September 25, 1899.* *Consul.*

*Sent to Department of Agriculture.

AMERICAN TRADE COMPETITION WITH GREAT BRITAIN.

Under date of August 18, 1899, Consul Marshal Halstead, of Birmingham, says that a strong feeling exists in England over the orders given for American locomotives for use on English railroads. He warns American builders that an effort will be made to find the locomotives inferior to British-built engines, and adds:

The railroad managers who have purchased American locomotives have been under a continuous fire of questions, and it is hardly worth while to add fuel to the flames by boasting that "prices will settle future locomotive orders in America's favor." Why not permit the answer of the railroad managers—that the purchases were made because British shops were too busy to take further orders—to have its soothing influence? The matter of price, or of efficiency, if a change in construction is required, counts for less here than in the United States.

There is a good deal that is protective in this attitude on the part of the British public, in questioning those who dare to buy abroad articles which might be made here. The Atbara Bridge contract, the Birmingham Post says, promises to become "a classical instance of the kind of competition in which English firms have been apt to get the worst recently;" it promises also to be a classical instance of a protest, because British officials in Egypt purchased where they could get the article quickest. The Birmingham Post says:

> That the English makers were hopelessly underbid with regard to price has been before explained, but it appears that the principal and, indeed, the sole determining factor was the time of delivery.

The earliest English offer was six months; the Americans accomplished the work, despite a week's delay because of the great snowstorm of last winter, in forty-two days. Parliamentary inquiries were instituted by Sir Alfred Hickman last April with regard to the circumstances under which the contract for the bridge had been given to an American firm, which inquiry has resulted in a full report on the matter by Lord Cromer. An exactly similar case, though with smaller value, has come to my knowledge through the declarations before me, as consul, of apparatus purchased here by the United States War Department for use in Cuban light-houses. I have heard of no protest from the United States.

Mr. Halstead sends a printed account of the history of the Atbara Bridge contract, which is not given, as it has already appeared in American newspapers.

On September 5, 1899, Mr. Halstead writes further:

Under the headlines "Tried and found wanting" and "No repeat orders," the Ironmonger says:

The American locomotives which have been delivered to the Midland Railway Company are naturally being subjected to some very keen criticism by English engineers. The representative of one well-known locomotive-building firm in this country gave me the other day quite a long list of their alleged defects, one of the gravest being the state of the boilers, which are said to leak so badly as to leave a distinct track along the ballast wherever they go. The engines are nothing like so strong as English makes; they are very roughly finished throughout, and when the parts arrived in this country it took the workmen as long to put them together as an English firm would require to build the entire machine.

* * * * * * *

The comments of English engineering experts who have examined the American locomotives are by no means flattering, and it is confidently asserted that when (in the not far-off future) the engines have to be sent to the repairing shop, the verdict on their construction will be so unfavorable as to bar the placing of further orders. That this opinion is not due to mere insular prejudice on the part of the makers in this country will be conceded when I mention that two French engineers who inspected the Yankee locomotives at Derby fully confirm the conclusions arrived at as to the inferiority of the imported machines to those of British make, alike in point of strength of construction and general excellence of workmanship.

The London Daily Mail to-day quotes Mr. C. Rous-Marten as saying that Mr. Johnson, the mechanical engineer in chief of the Midland line, informed him that—

As soon as all the American engines were erected they would be placed on regular duty in comparison with a like number of British-built engines of approximately equal power, and, after a certain period, the results would be fairly and impartially compared.

Mr. Rous-Marten credits Mr. H. A. Ivatt, locomotive superintendent of the Great Northern Railway, with saying:

I have been examining them and I can not find any important part that ought not, with fair usage, to last as long, or nearly so, as those of our own engines.

EXCESSIVE FREIGHT CHARGES TO GREAT BRITAIN.

Consul Marshal Halstead, of Birmingham, on August 23, 1899, sends copies of recent correspondence between himself and the freight bureau of the National Association of Manufacturers. It appears that a Birmingham merchant was forced to pay, on a shipment of goods from Minneapolis valued at $9.30, £2 19s. ($14.35) freight charges; in other words, the Minneapolis concern, says the consul, evidently knew nothing about freight shipments and simply sent the goods through without inquiring as to charges, and the steamship line took advantage of the opportunity and made the excessive charge

of £2 2s. ($10.20) to carry the goods across the ocean. Mr. Halstead wrote to the National Association in regard to the matter and their reply says, in part:

This particular case only shows how little our manufacturers realize the importance, in opening foreign trade, of availing themselves of the proper facilities for getting their goods to destination.

Had this shipment passed through our hands, we would probably have delivered the goods from Minneapolis to Birmingham under contracts at not over $4.50, possibly $5, and perhaps for very much less. A recent report of the association shows a net saving of over 13 per cent upon all shipments made by it.

BRITISH SHIPPING TRUST.

Consul Marshal Halstead, of Birmingham, in transmitting a clipping from the Sunday Chronicle, says, under date of August 15, 1899:

Once in a while, a voice is raised in England against a British trust, but generally any protest is in low tones, and trusts are accepted as a necessary modern condition. The inclosed article gives the facts of the way this particular trust injures British trade and helps foreigners.

The article reads, in part:

The Board of Trade has undertaken to make an inquiry into the effect of the shipping rings upon our trade.

The ring, or conference, as it is also called, is a combination of two or more lines of ships to control the freights on a particular ocean trade route—in other words, to secure a monopoly of a particular freight market for the benefit of the members of the ring. This system is so widely extended that there are few ocean trade routes of importance which are not in the grasp of a combination of the kind, and the result is seen, not merely in the artificial enhancement of freights from British ports, but in the preferential rates given to foreign competitors with British traders at foreign ports. The ring may not be designed with that object, but its result is to give the German and other continental and American traders a tremendous pull in the markets of Asia and Africa by reason of the cheapness of freights granted to them for the carriage of their goods by the same steamers as carry the goods of the Englishmen at very much greater rates. This system is pursued by mail companies which receive subsidies from the home and colonial governments, and have not apparently a keen sense of their obligations. At any rate, these cheap freights are granted to the foreigner by the steamers which carry our mails and draw our money, and at the same time charge our traders more for the accommodation they get in the vessels than they charge their rivals.

Let us see first how the ring, or conference, works. The various lines sailing to and from certain ports agree upon certain minimum charges from British ports, and, having secured a virtual monopoly of the carrying capacity, they seek to prevent competition by an ingenious and effective weapon. They agree to pay to every shipper a certain rebate on the net amount of the freight he has paid the line during a period of six months, and this sum is only payable after the lapse of a further period of nine months. But there is a very important condition: The shipper must

not send a single consignment by any line not in the ring for the sake of a lower freight during the whole of that time, and if he breaks this stipulation he loses all the rebate which is accumulating to his credit in the companies' hands. The rebate for fifteen months will amount to a substantial sum, and the shipper will hesitate a long time before he agrees to sacrifice that bird in the hand for the sake of the two cheaper freight birds in the bush.

The rebate is not an ordinary discount, nor is it intended as such; it is not payable for nine months after it has accumulated, and that stipulation alone shows that it is intended to be kept in hand as a sort of bond or recognizance for the continuance of custom at the rates fixed, without competition by the monopolists. Of course, the conditions vary; but the rebate is in all cases a deferred payment, so that the shipowners hold at all times hundreds and thousands of pounds of the shippers' money on such terms that if they fail to comply with the mandates of the monopoly they lose every fraction of it. In the South African ring, the rebate is 10 per cent on the net freight received during a period of six months, and it is not payable till nine months after that period has been completed. If during that period of fifteen months, even after the commission has become due, the shipper falter in his allegiance to the monopoly, he loses all that is due to him, and you can see at once how strong is the hold of the lines on the customer in such circumstances.

It is contended that by these means the rings have (1) benefited foreign shipowners at the cost of British shipowners outside the ring; (2) maintained artificially the high rates of freight now in force at British ports; (3) deprived manufacturers and merchants of a free freight market and restrained the free course of trade; (4) enabled foreign traders, notably German and American, to get lower rates at foreign ports than can be obtained by British traders at British ports; (5) prevented other steamship companies from tendering for the conveyance of mails upon equal terms with the present mail companies.

The rings prevent, or at any rate have prevented, by various means up to now the starting of any rival lines from the British ports. The Bucknall Line to the Cape was intended to carry goods at lower rates than the ring ships and in competition therewith; it was boldly declared that it would not give in, and that it was not to be bought out. But the ring got the better of it because of the hold it had in its rebate system. The rivals gave in, and later on began to run their fine new boats to India against the older and slower boats of the mail lines. But there, competition is just as severely discouraged. The strangest conjunctions are seen in this alliance; for instance, the Peninsular and Oriental, the Austrian Lloyd, and the Rubattino Line combined, it is asserted, to throttle a small competing line running from Bombay. The English line, in fact, offered to carry cotton to Japan for nothing, so that the new line might be run off the route. This is the mail line to which we pay a subsidy exceeding £1,000 a day. Nor is this the first time the Peninsular and Oriental has reduced its freights for such a purpose only to put them up again when the competition which had been feared had been killed. To deprive some competing line of a chance, the freights have been reduced to a nonpaying level, and when the competition has gone they have been put up again to a high figure. It is objected that no part of the revenues of the country should be used for the purpose of helping a line to crush out all competition in this ruthless way, and the argument is hard to meet.

* * * * * * *

Take an illustration of the working of the rebate rule given me by Mr. Clarke, a member of a firm of South African merchants. Recently, an Austrian house offered his firm a consignment of goods for shipment to South Africa by an Austrian steamer entered outwards for Durban at cost, freight, and insurance 20 per cent under the prices which had been paid previously at Hamburg. The reduction was

distinctly due to the low rate of freight it was able to get from the Austrian steamer. But, as Mr. Clarke says, "we were, of course, unable to accept the consignment because had we done so we should have lost approximately a sum of £1,500, being the amount of commission or rebate that would have been payable under the rebate circular of the British ring, had its terms been adhered to." Therefore, the goods were shipped by the firm to a German agent at Durban and put upon the market in that way. * * *

The present position is that the British shipper to South Africa has to pay a much larger freight from his own ports by British lines than the German manufacturer or shipper has to pay at German ports by the same lines.

The result is very easy to illustrate. A firm of Portland-cement makers puts it in a few words: "In our particular trade, we have experienced to the full the effect of the South African shipping ring, as, owing to the low freights ruling from German and Belgian ports, we can not at the present time compete in the South African markets except at an actual loss." This is a sensational statement, but it is merely true. The same state of affairs was shown in South Africa some time ago. Then the members of the ring, while they were charging high rates to the British exporters, were actually loading steamers in America for South African ports and running them a longer distance at lower rates. The effect was put in a few words by a South African public man:

"Supposing England produces an article as cheaply as America, we are bound to go to America for it because of the difference in the freight. * * * If we buy goods at the same price in America as we do in England and land them 10 to 15 per cent cheaper, can we go to England for them?"

At that time, clocks were carried from America at 22s. 6d. and from England at 45s., and other illustrations could be given. Since then, American rates have been raised, but the traders had got a strong hold in the market and are still enabled to carry on a big trade, mainly by the help of preferential freights. By these means more than by any other, the foreigners have been getting our trade in South Africa in furniture, carriages and wagons, girders, nails, wire, glass, zinc, twine, and many other commodities.

TRADE NOTES FROM THE MIDLANDS.

The following extracts are from a report to the Treasury Department* by Consul Marshal Halstead, of Birmingham, dated September 9, 1899. Mr. Halstead summarizes a trade report in a local journal as follows:

There are still signs of summer-holiday slackness in several branches of trade in this city and general Midland district; but the volume of business continues to improve, and there is a confident feeling in regard to autumn prospects. Manufacturers, both in the textile and metal-working branches, are well, if not fully, employed; and in many cases are still in arrear with their engagements. In the cotton trade, there is room for improvement, business having been checked to some extent by the rise in prices consequent upon the advance in raw staple; but orders are coming in again rather more freely, and there has been such a great depletion of stocks lately that buying on a large scale can not be much longer deferred. In the woolen and worsted trades, business is strong and active, in sympathy with a further advance this week in the price of wool. Manufacturers are well engaged,

* The full text has been transmitted to the Treasury Department.

both for home and export trade, and in most cases are able to make a favorable report of the outlook. There is rather more doing in the foreign produce market, with an upward tendency in provisions. The metal market is strong, more especially as regards tin and spelter.

LOCAL INDUSTRIES.

The apprehension excited by the crisis in connection with the Transvaal affairs is exercising a depressing effect in several departments of trade and finance. The holidays and the hot weather have caused some restriction of production in several of the metal-working branches, and there has been a lull in export orders for goods of this class, owing chiefly to the recent great advance in prices. The volume of work under execution, however, is still considerable, and the inquiries arriving from various quarters leave no room to doubt the revival of demand as soon as the temporary disturbing causes have passed away. The revival of the American demand is slow, but progressive, both for metallurgical and textile goods. India and Burma have been excellent customers of late for galvanized iron, railway material, tools, implements, and machinery; but the high price of copper has evidently checked Indian demand for that metal, and exports, both of copper sheets and yellow-metal sheathing, compare very badly of late with those of twelve months ago. On the other hand, the demand for brass goods in the colonies, South America, and the Mediterranean continues very satisfactory. Although Germany is not taking so much pig iron as usual at this season, the German orders for hardware and machinery are rather above the average, and Belgium is also a good and growing customer for the same class of products. Brazilian orders continue to disappoint expectation, owing probably to the disturbed political condition of the country; but a marked improvement of trade is reported both with Chile and the Argentine Republic. In Cuba, merchants appear to be rapidly recovering the ground they lost during the American war, and there are some large special orders under execution for other West Indian islands, to repair the damage caused by recent hurricanes.

WOLVERHAMPTON AND DISTRICT.

A very steady business is being carried on by the hardware manufacturers in the neighborhood of Wolverhampton, and the general condition of the trade can be reported to be of a satisfactory character. Producers of general ironmongery articles for building purposes are fully occupied, and makers of naval ironmongery goods are in receipt of orders which keep them well employed. The output by the cast-iron hollow-ware manufacturers is of a regular character, and the electrical engine factories continue to be working overtime in order to clear off the numerous contracts on hand. The iron-plate department is fairly busy, and there is a considerable amount of work under execution by the stamped hollow-tinware makers for shipment to the colonies. Makers of edge tools and horseshoes are in receipt of work sufficient to carry them on for some time, and the heavy trades are all displaying considerable activity. Galvanized-iron manufacturers have plenty of orders on their books, and the producers of enameled advertisement plates have so much work that double shifts have to be kept going. A fair trade is recorded in steel toys.

THE IRON AND STEEL TRADES.

There has been a further recovery in the iron and steel markets this week, and pig-iron prices in the north are again advancing. In the Midlands, business is again fairly active. Manufacturers are heavily behind with their deliveries. Apprehensions are expressed in some quarters that prices have now advanced to such a point as to discourage many schemes dependent upon large and cheap supplies

of iron and steel. There is a rather stronger tone in Midland pig, but the backward movement noted a fortnight ago has not yet been fully recovered, sellers being no longer in the independent position they held a month or two since. The output of finished material is still contracted by reason of the oppressive temperature. There is an active demand for black and galvanized sheets. Standard quotations are as follows:

Articles.	Price.		
Pig iron:	£ s. d.	£ s. d.	
Staffordshire cinder forge	0 60 0 to	0 65 0	$14.60 to $15.81
Part mine	0 70 0 to	0 72 6	17.03 to 17.64
All mine	0 73 0 to	0 80 0	17.76 to 19.46
Best all mine	0 85 0 to	0 87 6	20.68 to 21.17
Cold blast		0 105 0	25.55
Northamptonshire forge	0 65 0 to	0 70 0	14.60 to 17.03
Derbyshire forge	0 67 0 to	0 72 0	16.30 to 17.52
North Staffordshire, Nottingham, and Leicestershire	0 65 0 to	0 70 0	14.60 to 17.03
Marked bar		9 10 0	46.23
Earl of Dudley's brand		10 2 6	49.27
Second grade		9 0 0	43.80
Common-marked second grade		8 10 0	41.37
North Staffordshire second grade		8 10 0	41.37
Hoop iron		9 5 0	45.02
Best hoop iron		9 15 0	47.45
Sheets—			
Singles	8 15 0 to	8 17 6	42.58 to 43.19
Doubles	9 0 0 to	9 10 0	43.80 to 46.23
Trebles	9 12 6 to	10 0 0	46.84 to 48.67
Nail rod and rivet iron	8 15 0 to	9 0 0	42.58 to 43.80
Galvanized corrugated sheets f. o. b. Liverpool	13 10 0 to	14 0 0	65.70 to 68.13
Gas strips		8 10 0	41.37
Steel:			
Bessemer billets and blooms	6 0 0 to	6 5 0	29.19 to 30.42
Best Siemen's billets and blooms	6 5 0 to	6 10 0	30.42 to 31.63
Mild bars	8 0 0 to	8 10 0	38.93 to 41.37
Plates	9 0 0 to	9 5 0	43.80 to 45.02
Girders and angles	7 15 0 to	8 5 0	37.72 to 40.15

In the north of England, there has been a further stiffening of prices this week. Cleveland has advanced 2s. 2d. (52.7 cents) and west-coast hematite 2s. 7½d. (53.9 cents). To-day's quotations are somewhat easier, at 67s. 3d. ($16.36) for No. 3 Cleveland and 64s. 6d. ($15.69) for gray forge, the market generally being somewhat disorganized. The advances lately declared in manufactured iron and steel are well supported, more especially as regards bar. In South Wales, the steel and iron works generally are well employed and prices are strong. Light rails are up to £7 10s. ($36.50), but tin plates are easier at 15s. 3d. ($3.71) for Bessemer steel coke and 15s. 6d. ($3.77) for Siemens coke finish. There is a firm market at Glasgow, closing at 68s. 1d. ($16.56) for Scotch.

SHEFFIELD TRADES.

Information obtained at the large iron and steel works is to the effect that every department is in full swing and likely to be for many months to come. Most of the machinery in the armor-producing shops is running continuously to meet the pressure for deliveries at the shipyards. The works engaged on shaftings and other heavy forgings are very fully occupied, and the Government is making inquiries with a view to placing contracts for the shafting and other heavy work required for battle ships in course of construction. The prosperous state of trade

in the United States has had the effect of easing the competition with which some makers of lathe, slotting machines, and similar heavy tools had to contend; but prices are still low. Platers for the trade are having a quiet season, the increasing sales of sterling-silver goods and the decline in the demand for plated ware of best qualities having adversely affected them. The local stag-horn merchants have come to terms and agreed to drop the ruinous competition which has prevailed among them. A revised price list has been agreed upon and issued to the trade. There is a very fair demand for medium and common ivory, and the dealers in celluloid, tortoise shell, and other imitations are doing a good business.

WEST OF SCOTLAND IRON, STEEL, AND COAL TRADES.

It is reported in iron-trade circles in the west of Scotland that in the course of the last week there has been quite a revival of demand for pig iron, and makers are finding some difficulty in meeting requirements. When the collapse in the iron warrants took place, over a month ago, buyers held off from a firm belief that makers would follow the market and reduce the prices. They did so to a moderate extent, but consumers had really no stocks in hand, and they have been obliged to again come forward and meet their wants. Makers, however, are not advancing prices; but if the demand should develop, a rise will inevitably follow. Steel makers are still fully employed. Locomotive engineers are as busy as ever, but they have not booked any new work of late. Pipe founders are well employed, and bridge builders have well-filled order books. The difficulty in nearly all departments is to guarantee anything like reasonable delivery, and that bars the way to placing a good deal of fresh work.

NEW RUSSIAN DREDGE.

Some time ago, the Department was informed by our consul at Liege* of the fact of the construction by the Cockerill Company, which has its main works at Seraing, near that city, of certain machinery destined for a dredge for the River Volga, ordered by the Russian Government.

The hull of the vessel was constructed at the company's works at Hoboken, near Antwerp, at which place it was fitted out completely, made its trial trips, and some weeks ago left there for the scene of its future activity.

Shortly before the time of departure, in response to an invitation tendered to me by one of the associates of Mr. Bates, the designer, the pleasure of viewing the vessel in detail was afforded, and its wonderful power and adaptability to the purpose for which it was designed created such an impression that it seemed to me a description of the same might prove of interest to our engineers and mechanics in general.

The machine referred to is constructed really in two parts, as her beam is limited by the width of the canal system "Marie," through which she must pass from the Baltic to reach the Volga. The

*See CONSULAR REPORTS No. 224 (May, 1899), p. 79.

double dredge can be operated as a whole, making a bottom cut 62 feet wide, or each half can be operated separately. Each half measures 216 feet by 31½ feet wide and 9 feet deep. At light draft, the hull draws 4 feet; the working draft is 8 inches greater.

The dredge is electrically self-propelling and controllable, the electric installation of each half consisting of a 600-kilowatt generator directly connected to a fore-and-aft triple-expansion engine.

The generator supplies two stern motors and two bow motors, each of 125 horsepower, driving 4-foot screw propellers. The generators also supply power to the two 30-horsepower motors mounted in the distributing pontoon and arranged to control the position of the pontoon line as required by operations. Lighting is done from a separate installation. Control of all motors is centralized in the pilot house.

Quarters are provided for the crew and Government engineers on each hull.

The pipe pontoons are elliptical air jackets, reversible and not easily affected by wind, waves, or currents. Metal joints are used, as these do not obstruct the discharge stream so much as rubber connections.

Each pair of compound cutter engines works four cutters. Each main-pump engine can develop 1,500 indicated horsepower.

The tender is a stern-wheel steamer with a speed of 10 knots an hour. The whole is manifestly much smaller than those used on the Mississippi, more effective, and can take care of more bars or miles of river than any plant heretofore devised.

HULL.

Each of the two similar hulls is built entirely of steel, with a 3-inch pine deck and a light, frame deck house. Near the bow are recesses for the suction ladders and their bearings, and farther back the hull is cut away on each side to provide space for a screw propeller. There are twin screws and rudders. The interior of the hull is divided by transverse bulkheads into water-tight compartments. Throughout the central part of the boat for three-fourths of its length there is a double bottom, which is in turn divided by longitudinal keelsons and water-tight floors into compartments, each of which is provided with an ejector for removing water.

PUMP AND MAIN ENGINE.

The heart of such a plant is the main centrifugal pump, and much depends upon its proportions and power. The runner is of cast steel and the shaft is a steel forging. The casing is in iron, cast in five sections, each of which may be replaced according to relative

wear. The runner will make from one hundred and fifty to one hundred and eighty revolutions per minute and is driven by a divided vertical triple-expansion engine, two cylinders being on one side of the pump and two on the other. Each cylinder has its own eccentric, the valve motion being variable in the high-pressure cylinder and fixed in the others. A throttling governor controls the speed. The proportions are: High-pressure cylinder, 21 inches; intermediate pressure, 34 inches; low pressure, 39 inches; stroke, 24 inches; indicated horsepower, 1,425 to 1,600. The engine weighs, complete, 45 tons.

ENGINES FOR GENERATORS, CUTTERS, ETC.

The engine for driving the electrical generator is of the usual vertical marine type, triple expansion, three cylinders working on three cranks. Cylinder diameters are: High pressure, 14¼ inches; intermediate pressure, 22¾ inches; low pressure, 37⅜ inches; stroke, 24 inches. The diameter of main shaft is 7⅜ inches; the indicated horsepower, 800; revolutions, 200 per minute; and total weight of engine, about 25 tons. A large governor acts on the valve gear of the high-pressure cylinder, regulating the speed.

The cutters are driven by a pair of horizontal tandem compound engines placed side by side, with shafts coupled together to quarter cranks. A throttling governor of the Pickering type acts on the common steam pipe. These engines are very compact; substantial guides maintain the cylinders and shaft in relative position, and there is no bedplate. Each engine complete, with shaft, weighs about 6 tons. A 10-inch centrifugal pump provides the circulation in the surface condenser. The upper part of the latter forms a feed-water heater.

BOILERS.

One feature of the dredges which has given great satisfaction is the installation of water-tube boilers, which are of the Babcock & Wilcox marine construction. There are four of these boilers on each hull half, making eight in all, with a total heating surface of 17,200 square feet. In addition to this, a small boiler of the same construction is fitted in a "stern-wheel" steamer, which acts as a workshop and general tender to the dredgers. This boiler has 1,000 square feet of heating surface.

The boilers are fired exclusively with naphtha. There are four burners of the Holden type fitted to each boiler in the dredge and two in the stern wheeler. The spraying of the naphtha into the furnace is accomplished by a steam jet.

On the official trials, which took place on the 24th to 29th of May, the boilers worked without a hitch, giving an abundance of steam.

On the full-power trials, with all the machinery running, no trouble was experienced in keeping the water level constant or in getting a sufficiency of steam, although working at a very high rate of evaporation, which would be, judging from horsepower of engines, nearly 8 pounds of water per square foot of heating surface per hour.

The combustion of the naphtha was very good, practically no soot being formed on the heating surface.

Temperature taken of the funnel gases showed these to be low—*i. e.*, about 500°.

The boilers are constructed so as to facilitate the cleaning of the tubes, both internally from the scale and externally from soot, etc. Repairs can be readily carried out on the boilers by the engineering staff, no skilled boilermakers being required for this work. A tube can be taken out and replaced in about twenty to twenty-five minutes, and as all the tubes are expanded, no special tools are required, excepting an ordinary expander.

PILOT-HOUSE ARRANGEMENT.

The pilot house or operating room is on the third deck in the forward part of the deck house. It is placed above the cabins, and large windows on all sides permit a clear view of surroundings. Against the front of the room and in the center of the boat is a stand of levers, which are connected to operate the friction clutches and brakes of a four-drum hoist below, the steam valve of the hoist, and the reversing gear. In addition, the steam-controlling gear of the engine driving the cutters is operated from the same place, putting all cutter movements under the operator's hand. A complete system of signal and alarm bells, cords to three steam whistles, speaking tubes, and a telephone to the end pontoon are within reaching distance. At the sides of the operator are the switches and controllers for the electric motors. The rear of the room is taken up with a marble-panel switchboard, rheostat, compensators, and other electrical appliances. Ample light and ventilation are assured, and for night there is an electrical projector or search light, which is controlled from below and can be directed where wanted. A steam steering wheel occupies the center of the room.

CUTTER MECHANISM.

That the mixture of solid matter and water shall be of the right proportion for the best output of material, four Bates cutters are mounted on each hull. In order that work may be done at different depths, these cutters, through proper mechanism, raise and lower on a fixed horizontal axis on the dredge; the cutters may descend to a depth of 16 feet.

The cutter engine, located in the forward part of the hull, drives a countershaft, which coincides with the horizontal axis of cutter movements. A pair of miter gears transmits the power to the ladder shaft, which carries at its outer end a bevel gear engaging one on the head of the cutter shaft. Inside and concentric with the cutters are the suction pipes, carrying an adjustable mouth of suction end which terminates about 1 foot above bottom face of cutter.

The arrangement of suction pipes and cutters is seen to form two distinct ladders, supported one on either side of hull and approaching each other at the bow. Here, the adjoining suction pipes are bolted together through the medium of a cast distance piece, giving solidity to the whole.

When the cutters are down in normal working position, they may work backwards as well as forwards, taking a face the full depth of the cutter. The greater part of the weight of cutters and suction pipes is carried by the two hoisting cables, through sheave blocks and sheave legs, to the hoisting drums, by which the depth of the cutters is regulated.

The chief reliance for protecting bearings which are under water is a constant stream of water fed to the center of each journal at a pressure of about 60 pounds from a special pump on the dredge. Removable sheet-iron covers with hand-holes are placed over all gears which are under water.

The ladder pipe throughout is of cast steel and is supported at the hull by two trunnions, which are carried by strong cast-steel bracket bearings. The trunnions are bored out around the center of rotation to permit the countershaft to pass through the inner one. The shaft has an outward bearing midway between the two trunnion bearings.

ELECTRIC SYSTEM.

The propulsion of the dredge is accomplished entirely by screws driven by electric motors, all other movements being effected by the direct use of steam. The fundamental idea in the installation of the electrical equipment, as indeed of all the machinery, has been that the directing mind in the operating room should have close at hand and always ready for instant use the means to start, stop, or modify all the movements of the great machine. To this end, the means of absolutely controlling the entire electrical apparatus is placed back of and to the right and left of the operator in the form of switches, rheostats, controllers, and compensators.

The system adopted is the three-phase, alternating current, permitting cheaper and lighter machinery and promising less trouble in maintenance than the direct current, although bringing with it

some difficulties peculiar to itself. The entire equipment was supplied by the General Electric Company, of New York, and so far as possible the apparatus is standard.

In each hull a 600-kilowatt, 550-volt, 24-pole generator is driven by an 800-indicated-horsepower marine engine, directly connected, running at 200 revolutions, thus giving a frequency of 40 periods per second. The current from this generator is led to four motors on the dredge and to two on the end pontoon. The former are all alike, being rated at 125 horsepower, having twelve poles and running at 400 revolutions. Each drives directly a four-bladed propeller 46 inches in diameter. Two of these are at the stern, and the other two are in recesses in the sides of the hull, well forward. The pontoon motors are of 30 horsepower each. They have ten poles and run at 480 revolutions, with their shafts coupled directly to propeller shafts carrying 20-inch three-bladed propellers. All motors are of the induction type. The leads from the generator are attached to the stationary field windings. The larger motors have collector rings and external variable resistance in the armature circuit. The wire forming the resistance for each motor is wound around an insulated 2¼-inch copper pipe 42 feet long, which, in 5-foot lengths, with special fittings at the ends, is carried on a frame. Through this pipe water (about 15 gallons per minute) passes by means of an electrically driven rotary pump, which keeps the temperature within proper limits. The resistance is divided into eight equal parts, and these are thrown into or out of circuit by a controller in the operating room or pilot house, similar to those in use on electric cars. Each of the four motors has its own distinct resistance and controller.

The pontoon motors have a fixed resistance in the armature circuit, and their speed is controlled by varying the voltage of the current supplied by means of a compensator—in other words, a form of variable transformer. Those two compensators are also in the pilot house.

A separate direct-current dynamo is required to excite the fields of the generator. This is an ordinary 15-kilowatt marine set, which also supplies current for a search light on the roof and for about sixty 16-candlepower incandescent lamps which light the dredge. Rheostats are provided in the exciter's field and also in the field of the generator, so that lamps may be kept steady under varying load on generator.

PONTOONS.

The design of the pontoons carrying the discharge differs somewhat from any heretofore employed. The displacement is such that when the contained pipe is full loaded, the draft of the pon-

toon is not quite 2 feet. With the exception of the two forming the ends of their respective lines of discharge pipe, all are of uniform construction. Each is 50 feet long from center to center of couplings. The cross section is elliptical, the horizontal axis measuring 9 feet 3 inches and the vertical axis 3 feet 3 inches. In the center of the pontoon is placed the discharge pipe, which is 33 inches in diameter. Thus, the pontoon proper forms an elliptical jacket for the pipe, whose axis coincides with its own.

The greatest wear being on the lower half of the pipe, there is an advantage in being able to invert it, which the symmetrical form of pontoon makes a simple matter. This section also has an advantage over the circular in having less draft and a stable equilibrium, enabling the men to walk freely along the line. There is an advantage as well over the rectangular section, in that there are no edges and hence no longitudinal angles with corresponding increase in amount of riveting. The form is one least influenced by wind, wave, or current.

The total length of the pontoon and the angle of deflection to be afforded at the coupling are determined, of course, by the curvature required of the line of pontoons as a whole. In this case, the length of pontoon adopted being 50 feet, 10° was fixed as the angle to which the coupling must permit deflection. This gives the line of pontoons a maximum possible curvature which corresponds to a railroad curve of about 20°; or the whole line of 1,000 feet can be brought around to a little more than a semicircle.

PONTOON JOINT.

The coupling adopted between pontoons is of a novel type and finds its first practical application in this plant. It is a compound device and may be called a coupling and joint combined; the former element being of the universal type and the latter of the ball and socket. All of the strain comes on the first, and water tightness is provided for by the second.

When in position, the encircling ring is attached at top and bottom to the socket casting by turned bolts 2 inches in diameter, with nuts and covers. At each side a 2-inch pin, threaded next the head and screwed through an overlapping lug bolted to the ball casting and fitting neatly into the ring, completes the coupling. These latter pins are about at water level when the pontoon is afloat and are readily and quickly placed or removed with a wrench. Sufficient strength and flexibility are readily provided. The joint is arranged to deflect 8° vertically, 10° horizontally, to right or left.

A novel feature is a pneumatic rubber tube, which is laid in an annular recess in the socket of the joint and bears on the spherically

turned surface of the ball. The tube is provided with a valve and is, in fact, nothing more than pneumatic bicycle or carriage tire. A foot pump maintains the pressure from time to time as required. The greatest pressure from within which will come upon the joint in practice will not exceed 25 pounds per square inch, which is bound to be well within the control of the pneumatic-tube packing.

The ring is a forging, while the two castings forming the ball and socket are of steel and are of the minimum thickness consistent with foundry requirements for good work. They are so formed internally as to give as small and as gradual a change to the cross section of the flowing stream of sand and water as is possible, and to reduce the obstruction to a minimum. These cast shells are riveted directly to the pipe, which projects several inches beyond the end of the pontoon. The whole joint is durable and compact, and will doubtless displace leather and rubber joints for large diameters of pipe.

DISTRIBUTION.

It is usually not enough that material excavated by the dredge shall be discharged at a certain distance. The place of deposit must in most cases be regulated.

The control of the end of the pontoon line may be accomplished in various ways. As the first requisite, it is necessary that the reaction of the stream as it leaves the mouth—or, perhaps better, the unbalancing produced in the interior of the discharge pipe by the free discharge—shall be compensated in order that the pontoon line may hold the position given it without tendency to twist or kink. That being accomplished, motion may be given to the discharging pontoon by altering the direction of the outflow by independent means or by both. The latter plan has been adopted here.

The simplest and the usual expedient for balancing the reaction is a "baffle plate," held by fixed or adjustable stays just back of the end of the pipe and perpendicular to the discharging stream, whose impact it receives. In the present case, the ordinary baffle plate is supplemented by two curved plates placed in front and bearing on it. These plates form a vertical wedge, which is normally in the middle of the discharge stream, divides it in equal parts, and deflects both equally to right and left. On the back of this wedge is a horizontal rack moved by a fixed pinion, which receives its rotation from the pontoon through a handwheel and a worm gear.

By moving this wedge to one side or the other, the horizontal balance of the deflected stream is destroyed and transverse motion is thus imparted to the pontoon.

It will be noted that as the discharge stream is diverted laterally

in all positions of the wedge, the effect as regards longitudinal equilibrium is the same as with the baffle plate.

To more fully and freely handle the pontoon line when not running, the designer has added a compartment to the end of the last pontoon, in which are installed two 30-horsepower three-phase-induction electric motors, each driving directly a 20-inch screw propeller and obtaining current from the dredge. These are controlled by the operator in the pilot house, and with the adjustable baffle-plate device give great freedom of movement.

STERN-WHEEL TENDER AND BARGE.

In addition to the large amount of machinery on each dredge half, accommodations are provided for seventeen officers and men above and below the main deck, with the appropriate galley and wardrooms. A blacksmith forge, with necessary tools and facilities for light repairs, is also provided.

To give greater scope to these departments, a stern-wheel boat 125 feet long by 26 feet beam and drawing but 2½ feet of water has been added to the equipment. On this are provided handsome quarters for officers and bunks for ten men, with culinary arrangements complete. On the main deck is a small machine shop, with lathe, drill press, and shaper, driven by a small upright engine. Electric lights, with a search light on the pilot house, are provided. The main engine is compound and indicates 200 horsepower.

This boat is to act as tender to the dredge and carries near the bow a boom derrick and pump for placing the steel water-jet piles, which serve as anchors for the attachment of the head lines when the dredge is in operation. These piles weigh about 3,000 pounds each, are 30 feet long, and have proven very satisfactory.

An oil barge to carry fuel completes the list. It is of ordinary construction, carries six tanks of a total capacity of 130 tons, and is 80 feet long by 20-foot beam. The loaded draft is 4 feet.

TESTING THE DREDGE.

All parts of the dredge were subjected to searching trials prior to the departure of the plant for St. Petersburg. One set of tests for one-half of the dredge was conducted at Drygoten, Belgium, on a testing ground provided by the Belgian Government, in a basin of about 40 acres; the other was conducted at Steendorp, on a bar in the River Scheldt, about 10 miles above Antwerp. Unofficial trial No. 1 at Drygoten was for the purpose of ascertaining the precision with which a given stratum could be taken, and it was found possible by raising and lowering the cutters to take a stratum of

thickness up to 7 feet. The dredge advanced at a speed proportioned to the depth of the cut—fast for a shallow excavation, more slowly for a deep one. One test for an average cutting of 2 feet 4 inches resulted as follows:

Distance run	feet...	1,200
Time	minutes...	76
Advance per minute	feet...	15.78
Average cut	do.....	2.38
Rate per hour	cubic yards...	2,590

Material was of fine, compact sand and clay. This had been formerly farm land below the plane of cultivation. The cultivated surface had been previously removed for the construction of levees.

Two weeks later, the first official Russian trial was made in a cut parallel to the former, with higher steam, more pump revolutions, and a crew which had become familiar with the mechanism. In this trial, the result was as follows:

Distance run	feet...	1,000
Time	minutes...	37⅓
Advance per minute	feet...	26.8
Average cut	do.....	2.44
Rate per hour	cubic yards...	4,524

The material in this cut was favorable, half of it being a loose sand, the other half a compact sand mixed with clay.

The trials of the other half of the dredge were conducted on a large bar at Steendorp composed of very fine sand. Some cuts were along hard, packed material; others were in material relatively loose. None of the material on the Scheldt is of so favorable a character as the coarse, loose sand met with in the cross-over bars of the Volga and Mississippi rivers. Preliminary to the official trials, two prolonged tests were made at Steendorp to determine methods of sounding and measurement. The first test showed an average rate of advance per minute of 10.13 feet; average cut, 5.66 feet; rate per hour, 3,824 cubic yards. In another place, the advance per minute was 9.09 feet; average cut, 4.62 feet; rate per hour, 2,803 cubic yards.

It was observed that on account of the hardness of the face, the cutters were not powered sufficiently high to supply the full carrying capacity of the pumps. The second official test, conducted at Steendorp, resulted as follows:

Distance run	feet...	2,129.5
Time	minutes...	180
Advance per minute	feet...	11.83
Average cut	do.....	3.52
Rate per hour	cubic yards...	2,860

Material, fine, compact sand. All tests were conducted with 700 feet of discharge pipe. All measurements were in excavation, and, to determine the capacity, upwards of 5,500 soundings were taken. The Mississippi measurements were barge measurements, and to make comparison with the maximum capacity rate achieved by the *Beta*, it is necessary to double the official test No. 1 (4,524 cubic yards) of the half *Volga*, and add 15 per cent, or 10,404 cubic yards, which is 30 per cent higher than any previous record. At the termination of the trials, it was officially considered that each half of the dredge would be conservatively rated as having an hourly capacity of 2,700 cubic meters, or about 3,500 cubic yards; a total for the whole plant of 7,000 cubic yards per hour. It was also demonstrated that working on a cross-over bar, with a current velocity of 3 to 4 knots per hour, the dredge could be maneuvered with facility with but one line (a head line), thus doing away with half a dozen lines heretofore necessary for holding and maneuvering. As the machine is self-propelling and self-controlling in the current, the electric features have manifestly added enormously to the effective use of the dredge and have minimized all possible interference with commerce.

GEO. F. LINCOLN,
Consul-General.

ANTWERP, *September 15, 1899.*

LEASE OF GOLD-BEARING LAND IN SIBERIA.

The chargé d'affaires at St. Petersburg, Mr. Peirce, sends, under date of September 20, 1899, printed copy of a circular issued by the Ministry of Agriculture and Domains, in regard to leasing six tracts of land in Siberia, a translation of which reads:

PUBLIC AUCTION OF GOLD-BEARING LANDS OF OKHOTSK.

The Ministry of Agriculture and Domains (department of mines) informs the public that on the 15th–27th of February, 1900, at 2 o'clock precisely, there will take place the public auction of the gold-bearing lands situated on the northwest coast of the Sea of Okhotsk, under the following conditions:

I.

The gold-bearing lands of the northwest shore of the Sea of Okhotsk, situated in the basins of the tributary rivers of this sea, which are (1) the Aldama and the Oui, (2) the Lantar, (3) the Mouté, (4) the Némoui, (5) the Kyran, (6) the Yana, are to be leased for the extraction of gold and accompanying metals for a period of fifteen years by means of public auction. Each basin forms a separate section, except those of the Aldama and Oui, which will be taken together. The preference will be given to the contracting party who shall offer the highest royalty per pood of gold extracted.

II.

Declarations of participation will be received from all persons having, according to the laws in force, the right to engage in gold mining in Siberia, whether Russian subjects or foreign individuals, associations, companies, or joint-stock societies, on condition that they present (1) a guaranty of 100,000 rubles ($51,500) and (2) information regarding the capital to be used for the development of the gold lands in the basin in question. This information must be recognized as correct and the capital as sufficient by the Minister of Finance, in accord with the Minister of Agriculture. Companies and associations are required, besides, to present the statutes by which they are governed; joint-stock societies must be formed in compliance with the statutes governing the same. The requests for approbation of these statutes should be addressed to the Minister of Finance, who, in accord with the Minister of Agriculture, causes them to follow the prescribed course.

Remark I.—Information as to the amount of the capital in question, as well as copies of the statutes of associations, companies, or societies, must be presented to the Minister of Agriculture and Domains, at the latest, two months before the 15th–27th of February, 1900.

Remark II.—In the event of the grantee refusing to conclude the contract, the security of 100,000 rubles ($51,500) will be confiscated by the treasury.

III.

The auctions will be held at the office of the board of mines (Ministry of Agriculture and Domains). The bids presented, in writing, folded and sealed, must specify (*a*) the name of the bidder or of the firm, (*b*) the residence or office of the firm, (*c*) the name of the basin of which the bidder desires to obtain the grant, (*d*) the royalty offered for a pood of gold extracted. The envelope of the sealed paper containing the bid must have (*a*) the name of the person sending, (*b*) the name of the basin designated in the bid.

Remark.—A bid can refer to only one of the six sections designated above.

IV.

In order to insure the execution of the obligations of the grantee, 30,000 rubles ($15,150) of the guaranty deposited on the day of the auction will be retained and placed in the treasury to the account of the department of mines. Printed copies (in French, German, and English) of the conditions of the contract, as well as of the statutes which must serve as the basis for the constitution of joint-stock companies intended to work the gold mines of Okhotsk, and of the report (in Russian and French) made by the chief of the expedition of Okhotsk, M. Bogdanovitch, mining engineer, are sent from the office by post or delivered on demand, by the gold-mining section of the department of mines (St. Petersburg Ministry of Agriculture and Domains) every day from 1 to 4 o'clock. For further information, address the same division.

EXTENSION OF AMERICAN TRADE IN RUSSIA.

Parties in New York State have written to this office requesting certain information relative to the best means for the enlargement of trade in Russia, and inasmuch as it is of a character to interest all American merchants who are trying to export, I send my reply to the Department.

The questions asked deal with Russia, the possibilities of increasing trade in or introducing American goods into that country; if it is advisable to put catalogues for distribution in Russia in French or German, and if catalogues in French would be worth anything for distribution in Germany. They ask also for such facts and information regarding Russia as I am able to add.

There are many ways of doing business, but there are not many that excel those employed at home. The best way to build up a successful export trade is to carefully go over the ground to be covered, studying it in its minutest details. To do this well, an expert is almost indispensable. By expert, I mean a man familiar with the goods to be sold, their qualities, application, etc. Consuls can never hope to do more than point out opportunities in a general way. This they do quite successfully. The man who goes out to survey the ground should, if possible, speak the language of the people he is to study. This is not, however, an absolute necessity. What is wanted most at first is a man of brains to go over the territory studying its wants, possibilities, etc. Export trade differs from the home trade in this: At home, we know the people with whom we are to deal; in export trade we do not. This is a much more important factor than appears at first glance. Foreigners are affected by prejudices, and it is wrong to laugh at these prejudices. They must be overcome, and consuls can be of incalculable service in pointing out how best to overcome them. Our merchants must make up their minds to adapt themselves to the business methods of the people among whom they want to sell. This is law and gospel for those trying to win foreign markets.

After going over the ground and finding a good field, the next step is to learn conditions of sale, whether goods can be sold for cash or on what time. Russia, because of the old system under which goods were bought at the annual Nizhni Novgorod fairs, will demand long terms in which to make payments. This has changed to some extent, but in most parts of the Empire one will still find the long-term system in vogue; hence, anyone wanting to do business with Russia must be prepared to wait six months or more—in

many cases a year—for his money, nor will liberal discounts for cash do away with more than a very small percentage of these periods.

The next point is the kind of money to be paid, whether it is fluctuating or liable to fluctuate. Credits must be studied. In a country where so much business is done on long credits, one would imagine that a system like Dun's or Bradstreet's would be adopted. I regret to say that the system in Russia is very far from perfect, although it is fast improving.

The next step is how best to bring goods to the notice of those to whom it is desired to sell. Some goods speak for themselves; others have to be spoken for. There are several methods that may be successfully used to make goods known in the market. The best undoubtedly is to open a branch house, but that is very expensive; the next best plan, and one that commends itself because of its cheapness, is the employment of a resident agent—one who can give all his time to the business. A good plan is to pay him entirely or in part on commission. Next to this, and still cheaper, is to get agents already doing business in the districts to handle the goods. These "general agents" must be watched, however, as they have been known to suppress goods of one firm for the purpose of favoring a rival. A good plan would be for half a dozen or more houses to combine and send out a reliable man to represent them, allowing him to sell partly on commission and partly on salary. Half a dozen hardware houses, half a dozen or more paint, oil, and varnish makers could do this, taking care to get no conflicting parties connected with the same man. In selecting agents, too much care can not be exercised. In the first place, a firm of young men, without a dollar in the world above the capital invested in their business, may beat an old house so rich that it can not keep track of its possessions. Hustle has more to do with success in business than has almost any other factor. Once an agent has been selected, give heed to his advice. Intelligent agents ought to know best what is wanted in the territory covered. A little liberality goes a long way in winning new markets.

The next method—sending catalogues—is the poorest of all, and I hesitate to commend it. Still, it has one or two things in its favor. Parties interested in getting out catalogues will, of course, study the field in which they are to be distributed. Catalogues serve sometimes as advance agents, arousing interest; but they always do this best when printed in the language of the people to whom they are sent. The thing most needed about catalogues, if they are to be useful, is oftenest neglected, viz, the giving of prices. Catalogues lacking this essential element in nine cases out of ten are consigned to the wastebasket. In cases that call for the metric

measurements, do not give measurements common in the United States. This is very important. Few people are familiar with foreign weights, measures, etc. Let the language accompanying drawings or illustrations be so plain and so simple that a mistake will be practically impossible. It will be wiser to put catalogues intended for distribution in Russia in French than in German, for almost all educated Russians read, write, and speak French; and catalogues printed in French can and no doubt will be read in Germany. Of course, it will pay much better to put catalogues into the language of the land in which one intends to sell.

There are half a dozen "don'ts" that are well worth heeding. Don't abbreviate. Who over here is familiar with English abbreviations? Don't neglect your correspondence; it pays to answer letters promptly upon receipt, if only to say: "Yours received; will give it immediate attention." Don't fail to find out foreign postage laws or regulations and comply with them, always making sure to put on enough stamps to carry letters or samples to their destination. It is the custom in most countries to collect double postage on letters lacking the necessary amount. Put important letters beyond the peradventure of miscarriage. Don't mix up discounts, terms of payment, etc. Try to have everything clear before the first shipment is made. Don't have goods of a quality below samples. Packing is a very important factor; don't pack as if you never expected to sell another bill of goods. Herein the Germans excel, and it pays. There are few things more exasperating than to wait a long time for an article and have it come unfit for use. Don't, after you have gone to the trouble of picking out an agent, be forever doubting his honesty. He may find it necessary to do expensive things, and you may find that these pay. Don't expect too much the first year. The public has to find out the advantages of your goods. Don't despair if you don't do as much the first six months as you expected. It takes time to win a way in new, unknown, and hitherto untried markets. If you give a man a good field to operate in, don't discourage his efforts by dividing the territory into small, nonpaying parcels. Don't hesitate to consult consuls, who are nearly always well posted as to the possibilities of their districts. Don't fail to advertise in the best export papers of our own and other countries. It pays. Don't neglect the export organizations which are doing so much to make our manufactures known abroad. Don't put off till to-morrow what should be done to-day. The export trade is growing more and more important and we must go on and out or shut up a great many shops. Do what other successful nations are doing to get foreign markets, but do it first, if possible.

Russia has many points of resemblance with the United States.

It must not be forgotten that Germany has already gained a very important position—in fact, a commanding one—in Russian trade. Not only has she large amounts of capital invested, but she has a large number of her people there. The banking business is very largely in German hands or under German influence. Many of the mills now being built all over Russia are going up under German directors and are being paid for with German capital. German weavers and spinners are exploiting the entire Empire. It is time for us to take a hand.

The field open to us is enormous. Russia will want for a long time the same kinds of tools, implements, and machines that we have used. It has mines to open, oil fields to drain or exploit, forests to cut down, mills to build, roads, railroads, and bridges to construct. All kinds of time and labor saving machines will be wanted. One ounce of effort put into Russia will yield better results than tons in Germany and other parts of this old continent. Germany, Belgium, France, England—all of them—are aiming for the same goal—a foothold in Russia. An effort now, before the important parts are all taken, will pay much better than later on. The disposition of Russia towards our people is very favorable.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 4, 1899.*

AMERICAN COMMERCE IN TURKEY.

I inclose for the Department's information a translation into English of an article which recently appeared in the Cologne Gazette. The article has also been translated into Greek and published in the papers of this city, and comment has been made in regard to German vigilance in contesting every step taken by other nations for a commercial foothold in the Levant.

The manufacturers and exporters of the United States should understand that their German competitors are extremely watchful and aggressive in their commercial work in this country, and the energies of their consular officials and subordinates are freely given to this branch of the service. I note these facts for the purpose of informing the Bureau of Foreign Commerce and those interested in the export trade that there is pressing necessity for earnest and united effort, if any marked advance is to be made in behalf of American commerce.

A direct steamship service is not to be maintained and made permanent without the cordial cooperation of exporters; and the agricultural exposition and the warehouse for American goods about to

be established in this city will not be fairly representative of American progress and interests, unless they have active sympathy and support from the United States.

Those interested in our export trade should unite in supporting these enterprises,* instead of dividing their patronage among rival steamship companies, and appointing a large number of agents whose individual interests will be too small to justify an active and aggressive competition.

CHAS. M. DICKINSON,
Consul-General.

CONSTANTINOPLE, *September 4, 1899.*

TURKEY AND AMERICA.

[Translated from the Cologne (Germany) Gazette.]

Greater trade interests are being developed between Turkey and the United States. Through the activity of the United States consul-general at Constantinople, a steamer line has been established by Messrs. Barber & Co., to ply between the American and Turkish ports. Ali Ferrouh Bey, Ottoman minister at Washington for the past five years, has been working to establish better relations between the two countries. Three months ago, it was reported by the newspapers here that Ferrouh Bey's mission was to obtain the appointment of Caleb Witeheat at the post of general director of Turkish industry. There is also attributed to him the application made to the American Minister of Agriculture, asking that two professors, one an engineer and the other a manufacturer of much experience, should be sent to Turkey to establish agricultural schools. The fact is that Mr. Witeheat will be director of a factory, which, under the superintendency of the Turkish Minister of Agriculture, will prepare (or make) agricultural machines and implements. It is not a question of opening agricultural schools, but it seems desirable to invite men who can teach the people of Asia Minor how to handle the best agricultural machines and implements.

It has not, however, been decided yet that the Americans shall have the preference in this work. A few days ago Dr. Herman Schoenfelt, a German-American, was appointed Turkish consul-general at Washington, and that appointment was made with the view of further developing the relations between the two industrial countries. He does not accept the idea of those that maintain that closer relations between Turkey and the United States may prejudice the German interests. Ali Ferrouh Bey is a great friend of the Germans, whose activity in Asia Minor contributes much to the development of the country. The United States may compete with Germany in some things, but it is entirely certain that the industrial strength of Turkey will develop still more the Turkish-German commerce.

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* See CONSULAR REPORTS No. 224 (May, 1899), p. 76, and No. 228 (September, 1899), p. 184.

RAILWAYS OF INDIA.*

The total length of railways open and sanctioned on the 31st of March, 1899, after allowing for minor connections, was 26,059 miles, being a net increase of 604 miles during the year. The total length of railways open for traffic on the same date was 22,491 miles, being a net increase of 1,334 miles, leaving 3,568 miles still under construction or sanctioned.

The mean mileage worked during the calendar year was 21,475 miles, being an increase of 944 miles over the figures of the previous year.

The total capital outlay on railways open to traffic amounted on December 31, 1898, to $857,690,000, an increase of about $27,000,000, as compared with the expenditure incurred to the end of 1897.

The gross earnings in 1898 amounted to $87,885,561, or $5,981,012 more than in the previous year; and the net earnings amounted to $46,079,621, being an increase of $4,210,804; leaving a profit on the capital expenditure of 5.37 per cent, against 5.04 per cent in 1897.

The passenger tariff rates (average) per mile were: First class, 2.36 cents; second class, 1.13 cents; intermediate class, 0.56 cent; third class, 0.3 cent.

Tariff on freight per ton per mile (average) was as follows: First class, 1.59 cents; second class, 2.34 cents; third class, 3.6 cents; fourth class, 4.12 cents; fifth class, 5.55 cents.

The number of passengers carried in 1898 was 152,584,320, an increase of 1,320,505 over the previous year.

The aggregate of freight carried in 1898 was 36,350,900 tons, an increase of 2,652,283 tons over 1897.

The rolling stock was as follows in 1898: Locomotives, 4.335; passenger cars, 12,814; freight cars, 80,708.

It will be seen by the above that the mileage remaining under construction or sanctioned on the 31st of March, 1899, was 3,568 miles. Improvements are being made on the railways now open for traffic, to which I would call the attention of our manufacturers of locomotives, bridges, steel rails, cars, and other railway supplies, as it has been demonstrated that they can compete successfully for contracts for such supplies. Last year, 7,000 tons of steel rails were delivered in Calcutta from the United States, and now I am informed that the Baldwin Locomotive Works have a contract for ten freight engines for the Bengal State Railway, besides three or four passenger engines for the Bengal Central Railway, and that the Burma

*See "American railway machinery in India," *post* p. 654.

Railway, the Bombay Baroda, and the central India railways also have made such purchases.

To ascertain what supplies are required and when contracts will be let, our manufacturers should correspond with Sir A. M. Rendel & Son, consulting engineers, 8 Great George street, Westminster, S. W., London, for Indian state railways, East Indian Railway, Bengal and Northwestern Railway, Southern Mahratta Railway, and the Bengal Central Railway; and with Sir George B. Bruce, consulting engineer, 3 Victoria street, London, S. W., for Great Indian Peninsular Railway, Indian Midland Railway, and South Indian Railway. They should correspond with the director-general of stores, India Office, London, with reference to contracts for supplies for the railways worked by the state.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *August 31, 1899.*

TRAMWAYS IN BOMBAY.

Inquiries having been made as to the street-car system of this city, I submit a short report which, I think, may be of interest.

The company was chartered by the Bombay government in 1874 under the name of the Bombay Tramway Company, Limited. It has an invested capital stock of 30 lakhs of rupees, or about $1,000,000, and debentures of about two-thirds that amount. The stock is principally owned in the United States, and its main office is located in New York City. The road is a double-track system, with about 17½ miles in operation. The charter embraces the franchises of the entire city. The road covers the principal business centers, such as the fort district, Girgaum, Byculla, Parel, Mazagon, Grant Road, the railroad terminals, and docks. It does not extend to Breach Candy, Malabar Hill, or to any suburb or outlying district.

It has in use 187 open cars, made by the company in Bombay. It employs 1,150 horses, each of which travels on an average 13 miles daily. They are well cared for and never abused, a sort of a hat or padded bonnet being fastened on top of their heads during the day as a protection against the sun. All animals, in fact, receive humane treatment in India.

About 1,100 men are employed by the company. The car drivers and conductors are paid by the trip, and the former receive about 18 rupees* ($5.85) and the latter 22 rupees ($7.15) per month. The track, barn, and common laborers receive the usual Bombay wages of 6 annas (12 cents) per day.

*The consul estimates the value of the rupee at 32½ cents throughout his report.

The rails are of the girder type, 30 feet long and weighing 83 pounds per yard. They are laid on teak-wood ties embedded in concrete. The road was opened to traffic in 1874, and its present cost is estimated at about 35,000 rupees per mile of single track. The total gross receipts of the road for the last financial year were $398,498, and the operating expenses during the same year were $257,821.

There is now a movement to convert the road into an electric line. In fact, the company has applied to the Bombay government to sanction the conversion. Electricity has but recently come into use in India, Madras being the only city where it is used on street railways as a motive power.

The rents in the city of Bombay are extremely high. Bungalows rent from $800 to $2,000 per year, and flats without any modern conveniences for from $500 to $1,000 per annum.

The population of the city in the last census in 1891 was 821,764. The density of population in certain parts of the city is very great. In the native quarters, which contain most of the population, it is estimated that there is one human being to every 10 square yards of space.

The mortality at present is great, owing largely to the plague with which the city has been infected for the past three years.

In view of these facts, it is hoped that the Bombay government will speedily sanction the conversion of the present system of the street-car road into an electric line, and that the company will not only extend its service to all parts of the city, but also to outlying and suburban districts, and give the people of this city a service of cheap and rapid transit, thereby providing an outlet, as in many large cities of Europe and America, for its overcrowded quarters, and being of advantage not only financially, but also from a sanitary standpoint.

WILLIAM T. FEE,
Consul.

BOMBAY, *August 15, 1899.*

STREET RAILWAYS IN VERACRUZ.

In response to an inquiry by a New York trade journal,* Vice-Consul Pagés, of Veracruz, on September 20, 1899, says:

The following is a statement of the street railways in the State of Veracruz:

Ferro-Carril Urbano de Jalapa a Las Puentes; capital stock, $150,000 in Mexican currency; Apolinario Castillo, president, Mex-

* The editor has received copy of the report.

ico City, D. F.; Felipe Mazarrasa, jr., general manager, Mexico City, D. F.

Ferro-Carril Urbano de Cordoba; capital stock, $24,500 in Mexican currency; Adalberto Casa, intendente, Cordoba, V. C.

Empresa del Ferro-Carril Urbano de Veracruz. This property has recently been acquired by an English syndicate. The organization is not completed. It is understood the capital is to be $250,000. I am unable to give the name of the corresponding official of the new company, but a letter addressed to "Empresa nueva del Ferro-Carril Urbano de Veracruz" would reach the proper person. Mr. Fletcher Toomer, Mexico City, D. F., was connected with the transfer to the syndicate.

Empresa Urbana de Orizaba; an individual enterprise owned and managed by Angel Jimenez, Orizaba, V. C.

Ferro-Carril Urbano de Alvarado; a private enterprise owned and operated by Vives Hermanos, Alvarado, V. C.

Ferro-Carril Urbano de Tuxpan; a private enterprise, of small magnitude; address, "Empresa del Ferro-Carril Urbano, Tuxpan, V. C."

The above roads are at present operated by mule power. There is in no case a bonded debt.

None of the roads issue printed annual reports, and give private reports only to those financially interested. The Orizaba enterprise is understood to be profitable to its owner, Mr. Angel Jimenez.

The Veracruz road, when reconstructed, is expected to be a well-equipped, modern electric railway, furnishing ample transit facilities for Veracruz. In their management, the roads are conservative, and even the least profitable are supposed to be on a paying basis. These roads have hitherto obtained their equipment and supplies chiefly from the United States. With the exception of the Veracruz road, now in English hands, there are no new street-railway enterprises, nor are any extensive improvements announced by existing lines.

WATERWORKS AND SEWERAGE IN TAMPICO.

Tampico, on the Gulf of Mexico, at the mouth of the Panuco River, is comparatively a new city. It is now a deep-water port, and vessels drawing 24 feet steam up to the wharves. It is a railroad center, being a terminus of the Mexican Central Railroad and of the Monterey and Gulf Railroad. A bill has been approved by the State legislature for construction of waterworks, drainage, and street paving. An estimate of the value of the work to be done is about

$800,000 silver. The payment for the proposed improvements will be guaranteed by the State. Translation of the advertisement for bids reads:

The city council of Tampico, being authorized by the legislature of the State, in a bill passed on the 29th of June last, to solicit bids for the construction of waterworks to furnish 8,000 liters of potable water per minute for the individual and public use of the city, as also for a complete system of sewerage, including in this last the paving of the streets on the Macadam plan or any other good system, did, in open session to-day, resolve to invite all persons, companies, or enterprises in the Republic or out of the Republic, considered able to execute one or both of the proposed improvements, to present to this council their propositions under sealed cover on or before the 15th of February, 1900, leaving each bidder to formulate the propositions by contract at a fixed price, or as stipulated by the concession, the conditions to be expressed clearly in the proposition, and whether for one or both of the improvements. The following are the conditions to be noted:

First. The water must be taken from the Tamesi River at a distance of about 20 kilometers (12.42 miles) from the city, and may be brought by gravitation in vitrified pipe to a point approximately some 10 kilometers (6.21 miles) from the starting point, and an equal distance from the city. The water must be filtered before reaching the city.

Second. At the intermediate point, denominated Tancol, the machinery and necessary pumps can be located to raise the water to the height of Fort Liberty, which is an elevation of about 39 meters (128 feet) and distant some 9 kilometers from Tancol and approximately 1 kilometer (0.623 mile) from the city, which elevation will be sufficient to distribute the water in subterranean pipes throughout the city by gravitation.

Third. At Fort Liberty, an ample reservoir of masonry must be constructed to hold sufficient water so that the supply of the city may not suffer interruption for any cause.

Fourth. The network of tubing necessary for the distribution of the water throughout the city will approximate a length of from 9,000 to 11,000 meters (27,861 to 36,089 feet).

Fifth. The party or parties whose plans and estimates are approved must guarantee the fulfillment of the stipulations by a deposit of $5,000, which will be held by the State treasurer.

Sixth. The contract or contracts awarded must be made before a notary public, having been first approved by the State legislature, all the expenses for such documents being borne by the contractor or contractors.

Seventh. All information that interested parties may need will be furnished by the city clerk.

Eighth. All propositions must be presented to the mayor of the city on or before the 15th of February next, accompanied by the plans and necessary details.

Ninth. If a proposition is made to the city council by an individual, company, or enterprise residing outside of the city, some one domiciled in the city and with sufficient power to contract must act as a representative of such person or organization.

NEILL E. PRESSLY,
Vice-Consul.

TAMPICO, *August 12, 1899.*

MATCHES IN MEXICO.

In reply to a resident of New York,* Vice-Consul Pagés writes from Veracruz, September 20, 1899:

The cost of efficient labor in manufactories is: Male, 50 cents to $1 per diem; female, 25 to 50 cents. In match factories, practically all the labor is task work. Women are employed outside the factory to give shape to the boxes. The usual workday is: In the higher altitudes, 6 a. m. to noon and 1 to 6 p. m.; in the hot districts, from 6 to 10 a. m. and 11 a. m. to 5.30 p. m.

Wood is the most economical fuel for stationary engines. It is worth about $7 (Mexican)† per cord. Coal is worth about $5 gold per gross ton on board ship Veracruz.

Prices of matches are:

Description.	Lights.	Per gross.
No. 4, wood, single heads, safety	40	$1.50
No. 10, wax, single heads, noisy	80	1.90
No. 1, wax, single heads, noisy	25	.75
Lujo, wax, single heads, silent	46	2.00
Cruz verde, No. 1, wax, double heads, noisy	48	.80
Lujo el Toro, wax, double heads, noisy	68	2.25
El Recreo Grandes, wax, double heads, silent	82	3.25
Chilca "Carrandi," wax, double heads, noisy	40	.90
El Toro, No. 1, wax, double heads, silent	48	.87
El Recreo Chicos, wax, double heads, silent	80	2.25
Carranza, wax, double heads, noisy	42	1.00

The principal factory in this State—Mendizabal & Co.—which has branch factories in other parts of the Republic, is operated by French machinery, except the motor, which is from the United States. It employs about eighty men and boys. The women work at home. Most Mexican match factories are operated by machinery more or less elaborate.

Wax matches have almost entirely superseded the wooden matches formerly used in this country. The latter are still made in limited quantities and are preferred by some; but this preference is confined to the hot country and may be due, in part, to traditional prejudice. It is said that wooden matches are better for the hot country, as the wax is liable to melt and become sticky. The wax taper is less bulky, generally has two striking ends, emits no disagreeable odor, and is made waterproof. It is doubtful if a wooden

*To whom advance copy of the report has been sent.

†$3.36 gold; taking the valuation by the United States Director of the Mint, July 1, 1899, $1 Mexican=48.1 cents.

match could be made to supplant the wax, unless a manifestly superior article were produced at a lower price.

There are no matches imported. White-pine wood comes from the United States and paraffin wax is furnished by the Mexican connection of the Standard Oil Company. Boxes with rubber strings are now imported from Italy. The consumption of matches put up in this form is very limited—about 100 gross per annum for the Veracruz factory.

The number of people who purchase matches is relatively large. A very heavy percentage of the male sex smokes, the consumption of cigarettes being enormous.

DEMAND FOR BOILERS, ENGINES, ETC., IN GUADELOUPE.

I have been asked to procure information regarding steam boilers, engines, accessories, etc., for the largest machine shop here. This shop is connected with the steamboat line of the island.

The manager particularly desires information regarding portable steam boilers, mounted on wheels; marine engines for small steamers; marine boilers; steam and safety valves; lubricators; steam and vacuum gauges; ordinary steam pumps; ordinary pumps; steam fire engines, small; centrifugal pumps; horsepower rigs, with and without shafting or other gear for transmitting power.

In every case illustrated catalogues, in French if possible, are desired and the following information: Weights, net and boxed or packed for shipment; dimensions; price f. o. b. New York City. Exterior elegance and beauty of appearance are not so much desired as solidity, efficacy, and cheapness.

The discriminating duties against our machinery are very great, and have heretofore totally discouraged the importation of such articles, but last spring the experiment of bringing two small portable boilers and some other articles from the United States was made. The manager referred to thus expresses himself:

When they came, we were much disappointed. They looked rough and ugly, and we are accustomed to receive from France similar goods that are very beautiful and graceful to look at. But when we came to examine the interior, we were most pleasantly surprised—perfect adjustment, exquisite fittings, the minimum of friction and lost motion and maximum of efficiency and solidity. Your machines are incomparably better than our own in these respects, and much cheaper. If it were not for the enormous tariff, we would use no others; but, in spite of this, we want to see if we can not buy from you. If your manufacturers will help us, we can do it. Let them give us cheap, solid, honest work, with no expense for mere outside appearance, putting the finish only where it is needed; packing the goods as lightly

as is consistent with strength and safety in transportation; and quoting us bottom prices free on board in New York City (for we can not consider your inland freights, etc.). I believe that we will find the advantages of efficiency and durability sufficient to warrant our purchasing all such goods from the United States. Of particular interest are the horsepower rigs, an apparatus by which horses traveling in a circle drive a shaft through which power can be supplied to small machinery, pumps, etc., on sugar estates. If we can get our information and carry on our correspondence in French, it would be a very great advantage.

I have quoted him at length, as he covers the ground completely. The people he represents are of the very best financial standing.

I shall be pleased to receive catalogues, price and discount lists from manufacturers of the various articles above enumerated, and will do all in my power to foster the introduction of our machinery here. To succeed, however, honest workmanship, good materials, absence of useless and expensive adornment, and low prices are imperative. These people are slow to change, and if our goods can once get a foothold here, we can hold the trade for all time.

LOUIS H. AYMÉ,

GUADELOUPE, *September 22, 1899.* *Consul.*

OPENINGS FOR CAPITAL IN PARAGUAY.

It is incomprehensible to me why American capitalists overlook a country so full of promising opportunities for the sure investment of capital as Paraguay. I am more convinced than ever, since my recent trip through the Republic, that Paraguay is a most favorable country for the operation of American capital. I will name some new opportunities for investment:

(1) Bids will be open in six or eight months for the construction of a new city market. The old market will be torn down, and in its place will be erected a fine city hall. Capitalists could execute this work and take as a guaranty the rents from the new market. The rents will amount to $50,000 or $75,000 gold a year; the old market gives about $25,000 gold per year rent, and it is by far too small, covering only half a block, while the new one will cover a whole block.

(2) A new city hall will soon be constructed, the present one being in the lower floor of Congress Hall. Other public works, such as the docks, levees, city bridges, etc., will offer opportunities for profitable investment.

(3) A large pawn shop is needed in this city. There is not a pawn shop in Asuncion, although the people do a great deal of borrowing wherever money can be raised on their properties, upon

which they pay from 10 to 20 per cent per month. The Government would grant a charter to any pawn establishments that would fix reasonable rates upon money lent.

(4) An American bank could conduct a large and profitable business in building houses, such as are constructed in the United States by building and loan associations. There are many new modern houses going up in all parts of the city. Many more would be erected if the people could borrow money on reasonable terms and if the architects did not charge such exorbitant prices. The bank could get a clause in its charter to build houses, in which case it would be necessary to bring its own architect. A house of one story, containing only seven rooms of ordinary size, costs $4,000 gold. A bank having its own architect could build such a house for $3,000 or less and make a handsome profit. Material and labor are cheap.

(5) A penny savings department could be made a part of the bank, and would be liberally patronized by the people.

(6) The bank could export hides and skins. It could easily buy them in the country and sell them to Europe, America, or Montevideo for a good price.

(7) Oranges could be exported, not in the primitive way in which they are now shipped, but after the Florida manner—wrapped in paper and packed in small boxes. Many other fruits could also be exported. The Paraguayan oranges are in great demand in the countries south of here. Loans could also be made upon the agricultural products of the country.

(8) Large quantities of ordinary cotton goods are used, and a cotton factory could be erected and worked with profit. The Government would give the factory all possible encouragement in the way of protective duties, etc. Cotton grows very well in Paraguay. The stalk produces for two years—that is, when cut to the ground another springs up in its place, which is productive the second year.

Discouraging advice will doubtless be given to capitalists by certain parties here who have capital profitably invested and do not want it jeopardized. Here is what the Secretary of Finance writes me:

> Let an agent representing American capitalists, with power to act, be sent here to negotiate with this Government on these matters, and their eyes will be opened to the wonderful riches of this country and to the excellent opportunities for the employment of capital.

I would advise capitalists not to write any more letters, but to send a representative here to study the country, treat with the Government, and satisfy themselves.

JOHN N. RUFFIN,
Consul.

ASUNCION, *July 31, 1899.*

BLEACHED COTTON GOODS IN PARAGUAY.

Bleached cottons represent one of the most important importations of Paraguay. The trade in this line is not subject to the caprices of style. The goods are always in demand in both city and country. England has captured the trade here in white goods, but I think that there are opportunities for our exporters to get a share of this traffic, if they would send a man to represent them or samples to be placed on exhibition.

The marks of white goods most popular in this district are first and above all the "Estrella," or Star; second, the "Cometa de Betlehen," or Comet of Bethlehem, which is an imitation of the Estrella; third, "La Libertad;" fourth, "Bramante E," trade-mark F. K.; fifth, "Bramante Lavado Puro;" sixth, "Bramante Sin Egual," with a picture of a rooster as trade-mark; seventh, "El Pensamento," with a picture of a forget-me-not; eighth, "El Especialidad;" ninth, "Economica;" tenth, "Monumento Gloria a Colon;" eleventh, "Madras Estrella Lavado;" twelfth, "Escarabajo," with a picture of a spider as trade-mark.

It will be seen that there are many kinds of bramantes, or bleached cottons, in this market. Trade-marks which seem to have religious bearings, like the Comet of Bethlehem, take very well here.

QUALITY, WIDTH, AND PRICE.

The mark Estrella is the leading one here. It is 76 by 80 threads to the square inch; width, 35½ inches; length, 20 yards, or 18.29 meters. These goods should be marked in meters, because this is more convenient and profitable for the retail merchants, who buy by the meter and sell by the "vara," in which transaction they gain the difference—the meter being longer than the vara. The retailer pays $14 Paraguayan money (about $2 gold) for a piece of 20 yards. If the price could be lowered, so that the retailer could buy it for $1.75 or $1.80 gold a piece, this trade would be secured. The Comet of Bethlehem costs, for a piece of 20 yards, $1 gold.

La Libertad, which is 30 inches wide, is bought for 2s. 10d. (69 cents) from English commission firms.

IMPORTATION.

Last year (1898) there were imported bramantes to the amount of 85,055 kilograms (187,546 pounds), representing a value of $68,044 gold. The duty is 80 cents per kilogram (2.2046 pounds).

The people desire the lowest prices. While our goods show their superiority in texture, etc., after they are washed, their quality does

not influence the people. They want something that looks well and at the same time feels well—a smooth, compact surface. They do not care if it is nearly all starch; after it has been worn or washed out, they buy a new piece, because it is cheap.

The goods should always come in book fold, with the trade-mark covering the whole front, if possible. It should be in glaring colors, and the goods should have ribbon around them.

The usual credit is for six months.

JOHN N. RUFFIN,
Consul.

ASUNCION, *August 8, 1899.*

TEXTILE PLANTS IN PARAGUAY.

COTTON.

Cotton grows in Paraguay all the year round. The land and climate are favorable for its growth. The cotton plant, after it has produced, is cut down, and from its root grows another plant. I am told that it is always better to plow up the plants, roots and all, at the end of each second year and plant anew, as finer cotton is the result.

The Government is showing every possible interest in cotton growing. The Banco Agricola, a Government institution, buys all the cotton, giving $4 Paraguayan money (50 cents gold) for every arroba (25.35 pounds) with seeds and $13 Paraguayan paper ($1.82) for every arroba without seeds. The bank spent, in 1897, $15,025 in this line; of this, $7,131.30 was for implements, etc. The farmer can always have ready sale for his cotton.

Several kinds of cotton have been introduced for trial, and they have produced satisfactorily; some of our plants have been giving good results. I would specially mention what is called here "Algodon Criollo Norte Americano." I inclose a few samples—one called "Algodon Colorado," or red cotton, and the other "Algodon Blanco," or white cotton.*

SANSAVERDE.

Sansaverde is a fibrous plant which grows to a considerable extent in Paraguay. It is black, but after having gone through the machine it comes out white and silky. Damp soil is favorable for its growth. It has no thorns, which facilitates its gathering. I do not send seeds, because they would be of no service. It is necessary to plant sprouts, as is done with the banana. I inclose a small sample of sansaverde.*

The fiber—white, glossy, and strong—might be employed in imitations of silks.

*Sent with copy of report to Department of Agriculture.

CARAGUATA.

This is another fibrous plant of more prolific growth than sansaverde. It grows better wild than cultivated. The hills are covered with it. It has many thorns and is difficult to gather. The plant is cut down, and from the root springs a new one.

This plant is used for making heavy rope. It grows everywhere, awaiting the hand of the gatherer.

A machine to separate the fiber, wash it, etc., would be welcomed here.

JOHN N. RUFFIN,

ASUNCION, *August 15, 1899.* *Consul.*

SOUTHERN BRAZIL.

I have just ended a journey through southern Brazil, and submit the result of my investigations.

There is probably no land in the civilized world more interesting and less known than Brazil. Besides the facts that it is the country where nuts and Rio coffee come from, and that yellow fever rages there, very little is known among the masses abroad about the great South American Republic, which contains an area equal to that of the United States.

In speaking of the character of Brazil and the Brazilians, it is impossible to generalize. The inhabitants of Brazil differ radically according to the latitudes in which they live and the race mixtures of which they are the product. The Portuguese who came to Brazil after the discovery of the country and, later, the Spaniards intermarried with the native women, and the product of this Latin-Indian union is the "cabocle," so numerous in and so characteristic of the middle States of Brazil and of the great "hinterland" of the southern States—Matto Grosso and Goyaz—and the Republics of Uruguay and Paraguay. The introduction of negroes from Africa may have momentarily benefited the Portuguese pioneers in the northern States, but it has certainly not added to the ethical improvement of the Latin races struggling for existence on Brazilian soil and their cabocle offspring.

The Dutch who came with their war ships and controlled the north of Brazil for a short time during the pioneer period have left no traces, except some buildings and harbor improvements; and only once in a great while you meet in the north a robust, tall, and somewhat stoical native with blue eyes and blond hair, strangely in contrast with his surroundings—a descendant of the Dutch invaders. They did not "mix" with the Latin pioneers or the cabocle

negroides surrounding them. The black is now the dominant element in the northern States. The former slaves have numerically overwhelmed the race of their masters and have stamped that vast territory with the imprint of their individuality. The whites constitute only from 15 to 20 per cent of the population in the north of Brazil. Climatic conditions are such that the Teutonic and Celtic races can not prosper in the north of Brazil. It is not a white man's country.

Conditions are very different in the States of southern Brazil. There is life, vigor, and aggressive energy. While in the northern States, especially along the coast, the atmosphere is mostly moist, hot, enervating and often disease breeding, the three southern States—Parana, Santa Catharina, and Rio Grande do Sul—with the exception of a few coast towns, are blessed with an almost ideal climate and are absolutely free from epidemics.

While in the north the children of white immigrants are mostly smaller than their parents and show signs of nervous and organic degeneracy, the second generation in the south is very frequently more vigorous than the first and enjoys a degree of vitality unexcelled anywhere on our planet.

The same, by the way, may be said of the domestic animals. Horses, cattle, dogs, etc., rapidly degenerate in the climate of northern Brazil, but in the southern States their development and usefulness is all that can be desired.

There were always comparatively few colored people in the south, slavery not having been tolerated in the German colonies; and the Germans have never intermarried with the colored or cabocle element, and very rarely, so far as the first generation is concerned, with the native Latins, both races being a great deal less in touch with each other than they ought to be.

Although constituting one-fifth of the population of the southern States (300,000 out of 1,500,000) and having a financial and commercial importance far beyond their numerical strength, the German Brazilians do not take any part in national politics or, in fact, in anything emanating from the surrounding native element. They thus create for themselves a condition of isolation which has often given rise to the suspicion that they were endeavoring to establish a political commonwealth for themselves. Nothing could be more erroneous than this supposition.

What is known as the German-Brazilian element consists of immigrants from Germany; their very numerous descendants in the second, third, and fourth generation; German Poles, Austrians, Austrian Poles, Russian Germans, Swiss, Belgian Flemings, Swedes, Norwegians, and Dutch. As a rule, they are absolutely contented

with their lot in Brazil, although the more experienced and better informed among them are of the opinion that if the immigrants from Germany, who were induced by very considerable subsidies to go to southern Brazil, had settled in the United States, their possibilities would have been far greater; that they could have lived in more congenial surroundings among kindred people and enjoyed rights and privileges which are denied them here. The German Brazilians were hampered a good deal by what is known as the von der Heydt law, promulgated in Prussia on the 3d of November, 1859, prohibiting Prussian emigration to Brazil, which law was finally repealed, after a long and energetic agitation, in the year 1896. But even now, they have great difficulty in increasing their ranks from the old country, inasmuch as, for economic and military reasons, the German Government does not favor emigration, and there are at present very few Germans desirous of emigrating.

Of the 300,000 Germans in southern Brazil, not 200 are citizens of the German Empire. There are only 40 in the great German colony of Blumenau and about 30 in the much-talked-of Hanseatic colony of Joinville (Santa Catharina). They are nearly all Brazilian citizens, very fond of their adopted country, and would resent any interference from outsiders in their own affairs. The great difficulty of mastering the Portuguese tongue, in sound and construction so utterly different from their own, and of assimilating with people of the Latin race, with whom they have so little in common, is the cause of their isolation, so often commented upon.

Southern Brazil is wonderfully endowed by nature. It has a favorable geographical position, a fine climate, a rich soil, gigantic rivers, mountains, and meadows, a sea front of 750 miles on the east, with numerous natural harbors, and, last but not least, great forests, which, with their endless varieties of valuable hard woods, their palms, roots, and herbs, furnish the colonist with almost everything needed for food and shelter.

What southern Brazil needs is capital, transportation, and more men of skill and enterprise to develop its vast resources. Only one-tenth of this great country of 332,500 miles square is under the influence of civilization; there is nowhere a more lucrative field for legitimate enterprise.

Will the people of the United States, who have lately so vigorously asserted themselves as one of the leading industrial and commercial powers of the world, continue to refrain from competition with the Europeans in an American field of such exceptional promise? Of course, we can not send colonists; but we can send ships with merchandise and improved machinery; we can send capital with engineers and electricians; we can build railroads, bridges, and fac-

tories; we can organize new industries and improve the old ones; and we can show an industrious, hard-working, and sympathetic people how to fight the battle of life with improved weapons.

The development and advancement of the southern States of Brazil will be the stepping stone to an enterprise yet greater and more important, which can not fail to materially influence the character and future of the southern half of this continent, an enterprise cut out for the early part of the century on whose threshold we are now standing—the building of a railroad connecting the capital of Paraguay with the Brazilian railroads already existing or soon to be constructed, with terminal points in Porto União (on the Iguassu, in the heart of Parana) and in one or two ports of the State of Santa Catharina, on the Atlantic coast. Thus the great "hinterland" of the southern States of Brazil—Paraguay, Matto Grosso (so rich in mineral and agricultural resources), Goyaz, and a large part of the Amazon country, which territories now have but a slow and precarious river connection with the outside world by way of Buenos Ayres—would be brought 2,000 miles nearer their natural outlets and enjoy the blessings of rapid transit; the most important part of South America would be opened to the markets of the world.

We ought to have our legitimate share in this great industrial enterprise. We can not reap a harvest without sowing the seed; we can not expect benefits for something for which we have not worked in competition with others. The great commercial advantages the Germans have secured in South America during the last ten years are not surprising, in view of the efforts made by them.

German capital is largely invested there, and in a few months the German-Brazilian Bank, a very strong and lucrative institution, will have a branch in Porto Alegre. The German fleet in the service of the South American trade receives additions every year, and is devoloping into a highly profitable enterprise. Not less than thirty-one steamers were built by the Hamburg-South American Steamship Company within the last ten years for the service of the trade with the east coast of South America and the River Plata countries, twenty during the last five years, and six in 1898. Six steamers of this line call regularly at the southern Brazilian ports, and next year there will be two more, besides the cargo steamers of the Freitas Line, of Hamburg, and half a dozen steamers of the North German Lloyd and the Hansa Company.

If we are not willing to let our legitimate trade with South America, and particularly with the promising southern States of Brazil, go by default, we will have to bestir ourselves to make up for lost time and enter into a rational, vigorous, and systematic competition.

In order to do this successfully, it will be necessary to create a

regular American steamer service between the United States and the principal South American ports; to establish a banking system, with branches at Para, Rio de Janeiro, Blumenau, Porto Alegre, and Buenos Ayres; to take a leading part in the construction of railroads necessary to develop the resources of the southern States of Brazil.

The men who go there in the interest of American trade ought to be commercially and socially well trained, and not without the necessary linguistic attainments.

The incomprehensible lack of initiative on the part of our merchants and financiers regarding the southern Brazilian trade is illustrated by the fact that at most of the places in the interior of Parana, Santa Catharina, and Rio Grande do Sul visited by me there had never been an American before, and in the latter State we are represented only by the German importing firm of Thomsen & Co.—whose managing partner is Mr. E. H. Müller, of New York, a German American—a few missionaries, and one dentist.

It is extremely difficult to obtain statistical data anywhere in Brazil, very little attention being paid officially to that part of governmental science.

Most of the literature descriptive of southern Brazil is either obsolete or compiled by people who make a hurried trip along the seaport towns, relying principally on hearsay evidence and newspaper extracts.

My visit was extended not only to the coast of the south of Brazil, but to all inland towns and colonies of interest accessible by boat, horseback, or by means of those little springless vehicles drawn by four horses or mules which are so characteristic of overland traveling in South America.

Detailed information obtained during this trip will be sent later.

EUGENE SEEGER,

RIO DE JANEIRO, *July, 1899.* *Consul-General.*

THE TASAJO, OR DRIED-BEEF, INDUSTRY IN THE RIVER PLATA COUNTRIES.

Although the production of tasajo has been an industry of long standing in the Argentine Republic and the Republic of Uruguay, little seems to have been heretofore published on the subject.

Even before these countries had acquired their independence, and while still under Spanish viceroyal government, the preparation of dried beef was well known in the River Plata. The Spanish colonists applied a system of preserving beef by removing the fat and drying it by the simple means of exposing it to the sun and air.

This product was termed "charque," and is well known in the Argentine Republic, Chile, Peru, and on the western coast of Colombia. It is also called "carne dulce," being very slightly salted, to distinguish it from the "tasajo del país," which receives a stronger saline treatment. The tasajo, of which this report will specially treat, may indeed be said to owe its origin to "charque," being hardly more than an improved class of the same, capable of longer preservation, and hence possessing a greater commercial value.

A similar product known as "cecina," a term used in Spain for a species of preserved beef, was also manufactured in the past and at a very early date exported to that country.

The increase of stock raising on the lands adjacent to Buenos Ayres caused, as far back as 1602, the inhabitants of that city to solicit of and obtain from Philip III of Spain the permission to export "cecina" to Spain, and it is interesting to note that a first shipment of this product was made in 1603 in the vessel *Nuestra Señora de la Concepción.* In the same year, there followed five other shipments; in 1604, six; and in 1605, five.

Notwithstanding such shipments having been made and it having been related by le sieur D'Acarete* that a salting establishment ("saladero") existed in Salta in 1658, the production of tasajo and its kindred products could hardly be considered an industry of the country before the beginning of this century. This view is borne out by passages contained in a "memoria," or report, by Viceroy Vertiz, published at the close of the last century, wherein he recommends the salting of beef as a means of utilizing it and as a progressive step in the development of the pastoral interests of the country.

At the beginning of this century, however, the making of tasajo was unquestionably developing into an industry. A proof of this was the resolution adopted in 1812 by the junta composed of Gen. Don Juan Martín de Pueyrredon, Don Feliciano Antonio Chiclana, and Don Bernardino Rivadavia, that—

> For the purpose of establishing saladeros as institutions of primary importance to the country, salted meats, tasajo, tongues, etc., and similar products should be declared free of export duty.

The result of this law was the killing of cattle in such considerable numbers as to awaken apprehension of producing a scarcity of cattle in the country, so that in 1817 Director Pueyrredon issued an order strictly prohibiting the sale of cows to saladeros.

From then to the present time, the development of the saladero industries in the Argentine Republic and the Republic of Uruguay

* Recuerdos de Viaje.

has more or less kept pace with the expanding pastoral industry of these countries.

The census of May 10, 1895, the last that has been made in the Argentine Republic, fixes the number of cattle in that country at 21,701,526 head, of which 14,197,159 were native or criollo, 4,678,348 mestizos, 72,216 pure-bred stock, 1,800,799 milch cows of all kinds, and 953,004 oxen for labor. The total number is claimed not to have increased since then, but I have not been able to secure authoritative data on this point.

The animals used for the production of tasajo are chiefly of the "criollo," or native, breed, though some mestizo, or mixed, breeds produced by the crossing chiefly with the Hereford or Durham stocks are also used. The usual age for killing is from 3 to 4 years. Steers and cows are indiscriminately killed, though the tasajo from the cow is alleged to be somewhat finer.

The usual weight of the animals killed ranges from 750 to 950 pounds. Apart from the influence upon the price which the supply of and demand for cattle must always necessarily have, the weight and quality of the animal naturally play an important part in determining the price of tasajo cattle.

In the last killing season, the current prices were from $9 to $15 gold per head, and these prices have more or less prevailed for the past five or six years, while prior to that period it is claimed that they were somewhat lower. The price of Uruguayan cattle is usually 10 to 15 per cent higher than for Argentine, which difference is due to the superiority claimed for Uruguayan over Argentine cattle.

The average estimate of the yield of each animal is as follows:

	Pounds.
Main product (tasajo)	160 to 180
By-products:	
Hide	60 to 70
Tallow	70 to 80

Minor products (tongues, bones, horns, blood, and entrails) are estimated at a value of from 50 to 75 cents gold per head of cattle.

The price of tasajo ranges from $6 to $6.50 gold per 105 pounds, not including packing charges. A consignment recently shipped from this port for Cuba via New York, by the steamship *Newlyn*, was contracted for at $12.60 plus 50 cents packing charge, making the total price $13.10 per 200 pounds. The freight charges to Cuba at the present moment are excessively high, being 49½s., or $10.88 gold, per ton of 2,030 pounds. The normal freight rates to Cuba range between 36s. and 40s. ($8.76 and $9.73) per ton, including transshipment, which is done on account of vessel.

The prices of hides range from $9 to $10 per 105 pounds. Dry

hides are dearer than salted ones. In the treating, dry hides lose on the average 18 per cent in weight. In 1898, 23,173 tons of dry hides and 29,367 tons of salted hides were exported from the Argentine Republic at a valuation of $6,887,596 and $5,171,440, respectively, the export duty being 4 per cent.

The price of tallow averages $4.50 to $5 per 105 pounds. It is exported as "sebo" and "grasa derretida" (melted tallow or suet) in not inconsiderable quantities to Belgium, Brazil, Spain, France, Italy, Portugal, and Great Britain. The total exports of this article amounted in 1895 to 40,588 tons and in 1896 to 34,143 tons, valued at $3,807,751 and $3,179,326 gold, respectively.

Tongues sell on the average for $20 gold per hundred; although they constitute an important article of consumption in the Argentine Republic, they are also exported both salted and canned. The chief foreign destinations for salted tongues were, in 1895, Brazil, Great Britain, Germany, Italy, and France; but in the year following that date a remarkable falling off in the export of this article occurred, and it has not since revived. In canned or preserved tongues a considerable export trade continues, amounting in 1895 to 1,574,568 pounds and in 1896 to 1,279,576 pounds, valued at $157,455 and $127,955, respectively. Frozen tongues are now also being exported.

Horn, bones, bone ash, dried blood, and sausage casings, although articles of export, are too inconsiderable in amount to require any detailed reference here. The export duty on horns, bones, and bone ash is 4 per cent.

The method of making tasajo is simple, the chief agents in producing it being sun, salt, and air. The animals are taken from the "potrero," where they have been collected together from the camp the day before, and are driven from twenty to twenty-five at a time into a small inclosure. Overlooking this inclosure is a small platform upon which a peon is standing, who lassoes the animal. The other end of the rope passes through an aperture of the inclosure and is hitched to two or more horses ridden by young peons, who draw the animal forward towards the exit of the inclosure, where another peon awaits it, who gives it the death blow with the "facón," or knife, on the back of the neck, severing the spinal cord. The animal drops on a truck platform and is then removed to the place for cutting open.

Here it is quickly skinned and disemboweled by peons, and the whole flesh most dexterously removed with the knife from the skeleton of the animal in a remarkably brief space of time. The whole carcass yields six pieces for tasajo, namely, the four round quarters and the two sides, or "mantas."

The pieces vary in thickness from 1½ to 2½ inches. The prin-

ciple of cutting the flesh off of the animal for tasajo is to cut with the grain.

These pieces are then laid out for two or three hours under shelter to cool, when they are immersed in highly salted water from five to ten minutes. On the following or second day they are spread out and salted on the lean side, the salt being well rubbed in. On the third day, the other, or the side where the most fat prevails, is salted in like manner. On the fourth day, the salt is removed and they are piled up, layer upon layer. On the fifth day, they are again dipped into a bath to remove all grains of salt and then piled up, layer upon layer, in the open air to a height of from 10 to 12 feet, in squares or parallelograms of from 15 by 15 or 15 by 25 feet dimension. The whole portion of the process preceding the piling up is conducted under shelter in buildings open for the most part on all sides, and with a simple roof covering of corrugated iron.

The tasajo is then put up in piles, which are covered on the top with a canvas held down with big stones to prevent the wind from removing it and to gradually weigh down the meat, in order to press out the remaining superfluous juices that gradually trickle down the sides, forming small pools around the bottom of the pile.

The time required for the completion of the process is dependent on the weather. It consists solely in taking each piece of beef from the pile separately and hanging it over wooden railings erected for that purpose.

In replacing these pieces each night, the upper layers of the pile are placed below and the sides reversed. Three to four "tendidas," or exposures to the sun and air, in the summer months, usually suffice to obtain the Brazilian quality of tasajo. The Cuban tasajo requires longer exposure and desiccation—on the average four or five "tendidas" more. In summer, the meat is exposed or hung out on clear days from 9 a. m. to 5 p. m. and in the spring and autumn from 10 a. m. to 3 p. m., the greatest caution being observed to avoid its exposure during the hours when the dew is falling, which spoils the meat. It is claimed that the Uruguayan cattle produce 10 to 15 per cent more tasajo, being fatter.

The loss by shrinkage in the beef for Brazilian tasajo is 43 to 45 per cent, while that for the West Indian tasajo is from 50 to 52 per cent. The fatter tasajo is exported to Brazil, the leaner to Cuba and the other islands of the West Indies; the separation of these two classes of tasajo is made during the process of exposure. The price of Cuban tasajo is therefore from 10 to 15 per cent higher than that of Brazilian tasajo.

The rate of wages for labor at the saladeros is as follows:

Common labor earns from 80 cents to $1.20 gold per day. The most of the labor connected with the making of tasajo, such as

killing, skinning, and cutting and working up, is paid by piecework. A first-class expert workman or peon will earn as much as $7 to $8 gold per day; second class, from $5 to $6 gold per day.

The killing season begins in October and ends in June. The number of cattle killed for tasajo in the Provinces of Buenos Ayres and Entre Rios, Argentine Republic, in the last four seasons was as follows:

Killing season.	Buenos Ayres.	Entre Rios.	Total.
1896	209,500	199,600	408,900
1897	249,900	170,500	420,400
1898	105,700	169,800	275,500
1899	100,600	150,200	250,800

The number of cattle killed for tasajo in Uruguay during the same period was:

1896	316, 700
1897	303, 400
1898	311, 800
1899	306, 400

The great falling off in the number of animals killed in the Argentine Republic in the last two years, as contrasted with the Uruguayan figures, can to some extent be ascribed to the effect of the Cuban revolution and the Spanish-American war.

The following table, covering ten years, will show the amount of tasajo exported from the Argentine Republic, and its destination:

Export of tasajo.

Country.	1889.	1890.	1891.	1892.	1893.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Germany	48	54	.....	.....	36
West Indies (Cuba)	8,779	10,800	13,460	12,718	8,931
Belgium	.....	201	.....	3	.....
Bolivia	.....	.....	.....	1	1
Brazil	21,797	22,000	19,982	22,530	19,152
Spain	.....	3,360	567	1,706	5,076
United States	1	.....	.....	.....	.....
France	105	151	254	121	188
Italy	193	1	40	.....	.....
Paraguay	5	7	.....	.....	.....
Great Britain	604	2	59	660	217
Uruguay	2,530	3,398	3,069	4,049	4,242
Other countries	4,242	3,505	2,202	2,908	3,273
Total	38,304	43,479	49,633	44,696	41,116
Official valuation in gold	$6,139,875	$3,913,304	$3,566,854	$4,100,488	$4,115,134
			Per cent.	*Per cent.*	*Per cent.*
Export duty	None.	None.	4	4	4

Export of tasajo—Continued.

Country.	1894.	1895.	1896.	1897.	1898.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Africa	.....	1	.....	.....	.....
Germany	.....	14	.....	4,623	2,060
West Indies (Cuba)	11,619	12,191	3,250	.....	.....
Austria-Hungary	.....	1	.....	.....	.....
Belgium	6	15	17	6	5
Bolivia	2	1	2	.....	1
Brazil	22,271	31,429	32,273	24,970	14,369
Spain	1,118	2	36	29	1
United States	.....	833	37	260	157
France	45	250	93	208	90
Italy	.....	2	21	56	1
Paraguay	3	.....	3	.....	.....
Great Britain	46	212	12	232	.....
Uruguay	2,538	1,641	558	965	597
Other countries	5,190	8,497	9,605	4,889	4,961
Total	42,838	55,089	45,907	36,238	22,242
Official valuation in gold	$4,564,447	$4,225,419	$3,217,541	$2,446,315	$2,116,458
	Per cent.	*Per cent.*	*Per cent.*		
Export duty	4	2	2	None.	None.

The export of Argentine tasajo for the first six months of the current year was only 6,731 tons, valued at $698,499 gold, and no export duty is levied this year. The continued decrease of this trade during the current year may also be ascribed—and to some extent this holds good with respect to prior years—to the exportation of live cattle. This trade has unquestionably had the indirect effect of diminishing the tasajo industry by offering another more remunerative form of utilization of the year's increase of stock.

The exportation of live stock began about ten years ago and proved at first a failure financially, on account of only the criollo, or native kind, being shipped. But, with the breeding and export of finer cattle, this trade is proving remunerative. It has now reached a point where it pays better to breed a fine class of cattle for exportation alive than to raise an inferior kind for the saladero industry.

As above stated, the price of cattle for saladero purposes averages from $9 to $15 in gold, 3 to 4 years old, while those exported on the hoof, 4 to 5 years old, with a minimum weight of 1,100 pounds, sell on the average for $35 gold per head.

The exports of live cattle to Europe and Brazil from January 1 to May 31 of this year amounted to 69,000 head, about 14,000 head more than the number exported for the same period in 1898.

While the cattle in the Province of Buenos Ayres have undergone little change with respect to quantity, and have improved in kind, on the other hand, in the Provinces of Santa Fé, Corrientes, and Entre

Rios a large decrease in the number of cattle has taken place, and to such an extent in Entre Rios that the government of that Province has been debating the passage of a bill providing for levying a tax of $5 paper for each cow killed under 7 years of age.

Notwithstanding these facts, however, the demand for tasajo must continue to prevail, for it will prove, indeed, difficult to discover a substitute for it in any tropical market, since it is the only cheap form in which beef can be kept at such points for a long time without deterioration.

I hardly think, too, that the United States can even at present compete advantageously with the tasajo industry of the River Plata, the lower price of cattle, the cheapness of labor, and the climatic advantages here being too great to be even offset by any mechanically improved methods of preparation which we might apply.

The saladeros, or salting establishments, are chiefly located on or near the banks of the River Plata and its great tributaries, the Parana and Uruguay rivers. Sailing vessels and even steamers come up these rivers and the tasajo is shipped for Brazil or Cuba directly on board from the wharves of the saladeros. The important saladeros of E. Soulez & Co. and of Freitas y Giorgio are situated at Concordia, on the right bank of the Uruguay River, 280 miles from Buenos Ayres. Opposite to these at Salto, on the Uruguayan side of the river, are also two large saladeros. Another large establishment is situated at Colon; 70 miles farther down the same river, but on the Uruguayan side, at Fray Bentos, is also the famous Liebig establishment, which for the two years past, however, has ceased producing tasajo and manufactures only preserved meats, beef extract, and pepsin. In the Province of Buenos Ayres, at Magdalena, near the mouth of the River Plata, are located the large establishments of Rocca, Terrarossa & Co. and of J. B. Repetto & Son, the former establishment alone having killed in the last season 45,000 head of cattle for tasajo. Other saladeros in the Province of Buenos Ayres are at La Plata, Tuyú, Zárate, Bahia Blanca, Dolores, Chascomús, Lanús, Luján; those at the last six places mentioned, however, were not working this season.

In the Province of Entre Rios, in addition to those already mentioned at Concordia and Colon, one saladero was working this season at Garbino and one at Gualeguay. The most important saladero, however, in the western portion of Entre Rios is that at Santa Elena, on the Parana River. This saladero, together with the one at San Javier in the adjoining Province of Santa Fé, is owned by a Belgian firm—Compagnie des Produits Kemmerich—which killed during the last season 107,700 head of cattle, 64,600 of which were utilized for extracts of beef and preserved meats.

In addition to these, there is one other saladero in the Province of Santa Fé, one in Corrientes, and one in Salta, the latter, no doubt, supplying only the local demand and that, to some extent, of the Bolivian market.

It is difficult to give any estimate of the value proper of these establishments, as they are worked more or less in connection with the estancias, and I have not been able to secure any figures later than those for 1894,* in which year it was estimated that the capital represented in the Argentine plants amounted to $12,250,000 gold. This sum, in my opinion, is an underestimate, and, at all events, the amount at the present time must be considerably more, for the balance sheet in the annual report of the directors of the Kemmerich Company for 1898 alone fixes the value of the lands, stock, and plant of their enterprise at $2,933,418.80 gold.

It may be pertinent to state here that the owners of saladeros aim at securing large tracts of land in order to produce a portion of the cattle which they can utilize in the manufacture of their products. The saladero industry must, in my opinion, become more and more united with stock raising in order to prove safely profitable. This must be done in order to control the supply and the price of animals. Thus, for instance, the Kemmerich Company owns and controls 270 square leagues of land, from which it can annually withdraw 50,000 head of cattle for its saladeros.

In the Republic of Uruguay, the saladeros at Mercedes, Casa Blanca, Nuevo Paysandú, Guaviyú, and Nuevo Cuareim also deserve to be mentioned.

The above information has been collected and sifted from personal observation in company with Mr. F. L. Rockwood, an American, who has been sent here from the United States to make an investigation of this industry, and from consultation with several owners of saladeros, exporters of tasajo, and cattle brokers; among the latter, I take pleasure in naming Señor Don Nicolás Calvo, who holds a prominent position in that line of business. I have also freely consulted such historical publications and official statistics as I was able to secure on the subject.

I believe it would prove profitable for some of our great packing houses to engage in business here. Such a step, if it could be brought about, might eventually lead to a combination of American and Argentine meat interests.

FRANÇOIS S. JONES,
Chargé d'Affaires ad interim.

BUENOS AYRES, *August 24, 1899.*

*Second census of the Argentine Republic, May 10, 1895.

TIN IN STRAITS SETTLEMENTS: OPENING FOR CAPITAL.

Consul-General Moseley writes from Singapore, August 30, 1899:

At my request, Mr. J. J. Anderson, an engineer and surveyor of wide experience, has prepared and sent me the two inclosed letters, with report of the directors of the Straits Trading Company.

Mr. Anderson is a very capable man and is well informed as to the cost of the production of tin.

There is certainly a large profit made by the Straits Trading Company, as this company has complete control of the manufacture of tin in this section.

Knowing that tin is used in all American homes, I thought that these two letters of Mr. Anderson would perhaps be instrumental in causing capitalists and manufacturers in America to investigate this field, for I am sure that large profits will inure to those who may engage in the production and manufacture of so necessary an article. There are millions to be obtained by the right investment of capital, directed by American vim and vigor.

Branches of American banks, large American stores for the introduction of all kinds of American goods, a line of United States merchant vessels from here to New York and also to San Francisco would be the cause of largely increasing the trade of the United States with this eastern country. To my mind, no more inviting field than this can be found.

SINGAPORE, *August 1, 1899.*

ROBERT A. MOSELEY, Esq.,
Consul-General, U. S. A., Singapore.

SIR: With reference to our conversation of some days ago, I now furnish you with a statement setting down particulars somewhat generally of the scheme (crushing and washing ores and smelting tin, more especially the latter) which we discussed.

In the first place, I would draw your attention for a moment to the Straits Trading Company, a company whose sole business is buying and smelting tin and the only one which would have to be reckoned with. Their capital is $1,125,000 Straits currency ($541,125 gold*) and the company has always been able to pay over 20 per cent dividends to its shareholders. The smelting works are situated on Pulo Brani (Singapore) and all the ore is brought down the coast from the native states ports—Telok Anson, Klang, or Port Dickson. Of course, when one takes into consideration that coal is the chief factor in smelting, it is obvious that Singapore, situated as it is, is the place to erect works; but do away with the use of coal and the advantages lie in locating your workshop in the mining district.

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*Taking the value of the Mexican (or Straits) dollar at 48.1 cents, as estimated July 1, 1899, by the Director of the United States Mint.

The price of tin in January, 1898, was $37.12 per picul (133⅓ pounds); January, 1899, $50 ($24); to-day it is quoted at $85 ($41). This rise in price allows the low-grade ores and poor alluvial tin that have been lying untouched for years to be worked at a handsome profit, and it is being done. The Straits Company are increasing their plant to cope with the new and heavier demand made on them, and the Penang newspaper is advocating in its columns the establishment of smelting works there, so that town may share in the prosperity or benefits accruing.

Telok Anson, the chief town of Lower Perak, situated about 50 miles up the fine broad Perak River, which is navigable by all coasting craft drawing up to 16 feet, at any state of the tide, lies in the heart of the tin district, is connected by rail with numerous out stations, and within three years the great trunk line connecting the different states railway systems will be completed, bringing Telok Anson in direct railway communication with the whole peninsula.

I may mention that the different native states have already amalgamated their affairs and are known as the "Federated Malay States," with Sir Frank Swettenham as resident-general. Of course, it is known to you that all the different departments of the states have been under British officers for the last twenty to twenty-five years. About 160 miles west of Telok Anson, across the Straits of Malacca, in the Langkat district of Sumatra, are large oil fields. The petroleum refuse is now put to no useful purpose. I propose to use it as fuel in place of coal. The calorific power of ordinary English coal is 14,290 units of heat per pound; the calorific power of petroleum refuse is 17,630 units of heat per pound. Of course, it is well known the coal obtainable here is inferior in quality to that obtainable at home; but, taking it as a standard, you will note that in using petroleum you obtain better results, beside the larger saving in the first cost. As to that cost, I can give you no figures, for I understand at present the refuse is allowed to run away, there being no market for it; but a contract could be made whereby each party might be satisfied and still leave a wide margin between its price and that of coal.

As to the modus operandi, I would erect in Telok Anson a complete plant to crush or wash ores and smelt tin, have one or more expert and reliable men who thoroughly understand their business to travel around the different mines, assay the ore or oxide, buy and pay for it on the field, and send it right down to the plant.

To summarize the advantages of Telok Anson over Singapore, fuel has to be brought only 160 miles; while if taken to Singapore, it would mean 380 miles. In bringing ore or oxide from the states to Singapore, you pay freight on from 30 to 40 per cent of sheer waste, and with the double or treble handling your bags burst. The price of land in Singapore is at least treble that in Telok Anson, and, in fact, I doubt if a really advantageous site could be bought in Singapore unless at what is termed a fancy price. Labor is cheap and abundant, as well as articles of food, European and native. The climate is healthy, and there is plenty of good water.

As to capital to successfully compete with the Straits Trading Company, I should say a capital of $1,000,000 Straits currency ($481,000) would be required, as a large amount would have to be in hand to pay for the ores and working expenses. The plant to be erected would turn out 50 tons of smelted tin per day; cost, $120,000 ($57,720). I give you details of this expenditure elsewhere.

I inclose copy of the Straits Trading Company's report for the last six months,* and you will note that the quantity of tin delivered from the works during that period was 216,841 piculs (28,912,133⅓ pounds). The total amount of tin and tin ore exported from the three native states during the first six months of this year was 294,801 piculs (39,318,800 pounds), showing that the company have the entire monopoly of the business. You will also note that the company's smelting profit is

* Filed for reference in Bureau of Foreign Commerce.

$116,665 ($56,156); I understand $2 (96 cents) a picul (133⅓ pounds) is allowed for covering all working expenses in buying the ore; so if the above number of piculs be taken as the amount smelted, it works out at over 35 per cent profit on smelting alone. Taking into consideration the difference in price and calorific properties between coal and petroleum refuse, I don't think I am putting too high a figure when I say that 50 per cent profit could be made by using the latter.

To show you how we could pay a decent dividend on the capital of $1,000,000 ($481,000), I put down our output in six months at 100,000 piculs (13,333,333⅓ pounds); our smelting profit on that amount would be $100,000 ($48,100), and the tin profit $40,000 ($19,240). Any outside profits which would be made need not be considered, as the showing of a dividend of 14 per cent on six months' work, equal to 28 per cent per year, is ample for our present purpose.

That there is room for such a company as I outline, I think is quite obvious to you. The Straits Trading Company is the only one in the field, and were a new company to commence working on the lines I have sketched, it could more than compete with it.

Any further information which you may require I shall be very pleased to give at any time.

Cost of plant capable of turning out 50 tons of tin per day.

Description.	Straits currency.	U. S. currency.
Land	$2,500	$1,203
Two 30-horsepower boilers	8,000	3,848
One 30-horsepower engine	2,500	1,203
Pumps and extra gear	4,000	1,924
5 head-stamp battery	2,500	1,203
True vanners or concentrators	1,200	577
Roasting furnace	5,000	2,405
Smelting plant and appliances	20,000	9,620
Air compressor	1,600	770
Electric-light installation	5,000	2,405
Erection and material for building, including workmen's houses	12,000	5,770
Erection of plant, wages, etc	20,000	9,620
Wharf and pontoons (2)	15,000	7,215
Freight, tools, trucks, implements, and contingences	20,700	9,957
Total	120,000	57,720

I am, etc.,

J. J. ANDERSON,
Engineer and Surveyor.

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5 BATTERY ROAD,
Singapore, August 15, 1899.

ROBERT A. MOSELEY, Esq.,
Consul-General, U. S. A., Singapore.

SIR: You point out to me that the introduction of petroleum refuse in place of coal would be somewhat of an "experiment," and a company might be seriously handicapped thereby, and also that it would be as well to outline an alternative scheme where coal would be used as fuel.

With regard to your first point, I can not admit that using petroleum for our purpose would be experimental, for, since writing you last, it has come to my knowledge that the Straits Trading Company have tried it with success; but, having made no contract to start with, the agents of the oil company (Samuels, of London), at whose instance the trial was made, put up the price to such an extent that

it wasn't worth the company's while to convert their furnaces and break their coal contracts; and, having absolutely no opposition or competition to meet, they are quite satisfied to let well enough alone. It has always been my idea to make the putting up a plant in Telok Anson conditional on a contract which should be equitable to both buyer and seller, and yet leave a wide margin between the price of coal and that of petroleum refuse. I do not think it would be a difficult matter to accomplish.

I would not erect works in Telok Anson to burn coal, as it would have to be transshipped in Penang, and the extra freight (even if steamers were available) and handling would cost as much as, if not more than, the freight from home. That and the delay would kill any company. After weighing all the points carefully, I have come to the conclusion that Province Wellesley, the mainland opposite the town and island of Penang, is the best place to erect coal-burning works. The terminus of the Native States Railway is there; deep-sea steamers lie as close to the province as to Penang, and call daily; freights are the same, if not less, between home and Penang and home and Singapore; it is much closer to the whole tin district than Singapore and does not depend on sea communication; the railway is now open to the northern and richer tin district, and very shortly Selangor will be connected. A sea frontage is obtainable at no great cost, and that could not be had at any price in Singapore.

The total cost I gave you for the erection of works in Telok Anson will very well serve for Penang, as the conditions would be very much the same; the land and pier, which would be necessary, would cost a little more than I allowed, but the saving elsewhere would counterbalance that.

As to what a new company could earn, the report of the Straits Trading Company, which I inclosed with my last letter, speaks more eloquently and plainly than I am able to of what one company can do. Of course, you must remember it has no competitors at present; but I fail to see why another company with money—capital you must have—could not successfully compete with the present one. The Straits Trading Company have had a long reign alone, but, like all monopolies, do not give entire satisfaction, and with tin at its present price—which is likely to hold—and tin from Pahang, until lately an unknown place. coming into use, they are bound to have competitors.

I am, etc.,

J. J. ANDERSON,
Engineer and Surveyor.

SHIPPING LINES TO NEW CALEDONIA.

I am glad to report that the principal obstacle to United States trade with this district, viz, the lack of direct communication, is about to be removed. In a letter dated June 14, 1899, Messrs. Macondray & Co., merchants of San Francisco, inform me that they are about to send a sailing vessel of 1,000 tons register every three months direct to Nouméa, which they hope to keep employed regularly in the trade. This line of vessels is to supply this colony mainly with food products from California, which are to be consigned to an American commission house at Nouméa.

Return cargoes of minerals, copra, coffee, vanilla, pearl shell, bêche de mer, and other colonial commodities will be furnished.

As the commerce of New Caledonia, which for the past year has been growing very rapidly, is daily assuming much larger proportions, this line, in addition to the regular monthly steamship service referred to in my report of the 24th of June last* between San Francisco and Saigon, via Honolulu, Tahiti, Nouméa, and Manila, is certain to aid largely the development of trade between this colony and the Western States.

United States shipping this year will also be larger than ever before. The second vessel, the *Newsboy*, from Puget Sound, which arrived here with lumber, is about to return to the United States. A third vessel with a similar cargo, consigned to Messrs. Jouve & Co., of Nouméa, is on the way, and a fourth, with some 400 wooden cottages from Messrs. Renton Holmes & Co., of San Francisco, for the famous nickel mines at Thio, east coast of New Caledonia, is expected.

PAUL EUGENE WOLFF,
Commercial Agent.

NOUMÉA, *July 28, 1899.*

EXPORT DUTY ON FORMOSA TEAS.

Under date of Shanghai, August 23, 1899, Consul-General Goodnow transmits a printed extract from the Formosan, relative to the export duty now levied on Formosa teas, which, as the United States takes the bulk of such teas, must affect the trade accordingly.

THE NEW TEA DUTY IN FORMOSA.

From the coming into operation of the new treaties, export duties in Japan have been abolished, but not in Formosa. Here the old duties have been taken off, and in their place a new duty of 1.60 yen (80 cents) per picul on Oolongs and 1.20 yen (60 cents) on Pouchongs is imposed on all shipments to places other than ports in Japan, and on shipments to these latter a harbor duty of 1 yen and 0.60 yen (50 cents and 30 cents) per picul, respectively, is payable. These changes were made without any notice being given the general public or the firms interested, and it was first arranged that they should go into effect on July 17, but this was afterwards changed to August 4. The object of these new duties, at first sight, to one unacquainted with the actual circumstances of the case, would appear to be simply to encourage trade between the island and Japan; but the result is really, while observing the letter of the treaties, to set aside their general spirit and intention and effect a very substantial discrimination in favor of a route which happens to be under the control of Japanese steamship companies only, as against one which is not so controlled. The general purpose and intention of the treaties is to put foreigners and Japanese on exactly the same footing as regards both imports and exports, and to allow no discrimination in favor of either one or the other; but here, while obeying the letter of the treaty, the general tenor and spirit is entirely

*See CONSULAR REPORTS No. 229 (October, 1899), p. 339.

cast aside and a state of things inaugurated which amounts to a very practical discrimination against the foreigner. Moreover, as at present there are no sailings direct from Formosa to America—which is far and away the largest consumer of Formosa Oolongs, but only via Amoy and Japan, and as all shipments from Formosa to America must, therefore, go either to Japan or Amoy for transshipment, the effect of this law discriminating in favor of the route to Japan is to place shippers via Amoy at a positive disadvantage in the markets of America as against shippers via Japan, and as such is not only unfair in our opinion, but arbitrary in the extreme. The tea trade of the island has been built up in the past with capital introduced from Amoy, and Amoy houses have large interests here and are amongst the principal purchasers and shippers of the crop, so that discrimination against Amoy is the last thing one would expect from the Government, especially when one considers that trade was in full swing and well established long before the Japanese came to the island. We must say it seems to us a mistake, and, whatever may be their legal rights on the subject, looking at the mere letter of the treaties, we can not but think they are unwise in making any discrimination at all. Furthermore, as a matter of policy, and in their own interests, it seems to us very shortsighted.

Shipments to America during past years have been so heavy that at the present moment the stock of Oolongs in that country amounts to quite eighteen months' supply, at the average rate of consumption for all America, and the trade there is practically at a standstill, except for account of direct consumers; so that it becomes imperatively necessary, in the interests of the island, to encourage new outlets wherever they can be found, if production is not to be curtailed. Is this the way to encourage the finding of these new markets? We hardly think so. Competition is so keen now-a-days, that the very best thing the Government could do to promote the sale of the island's teas, and to encourage the finding of new outlets, would be to take off all duties altogether, if only revenue interests would permit it. Formosan teas would then be placed in a better position to compete with the teas produced in other countries, and the island's welfare and prosperity promoted accordingly.

TARIFF REGULATIONS OF KYAO-CHAU.

Consul-General Mason sends from Berlin, September 16, 1899, translation of the chief articles of the tariff of Kyao-chau,* as published in the German Export Zeitung, Berlin, September 15, 1899. The article adds:

As German business interests are mainly involved, it appeared desirable that German citizens should be employed as customs officials in the free port and that communication with the business world should be in German. The most important positions are therefore to be taken by Germans, or at least by foreigners who can speak German.

The most important point in the regulation is that the Chinese custom-house is removed to Tsintau. It was necessary that the free port should not be placed at a disadvantage in its through traffic as compared with other ports. The territory that has been leased appears to some extent a great depot within the district controlled by the Chinese customs laws, in which, from reasons of convenience, the customs officials are permitted to reside. As an emporium and place of consumption

*See CONSULAR REPORTS No. 229 (October, 1899), p. 273.

it enjoys free trade, as place of shipment for through traffic it possesses at least the advantages, the privileges and rights of a Chinese port.

A free port is thus founded without troublesome duty restrictions. As emporium and place of manufacture, Tsintau is without rivals on the Chinese coast; it possesses the advantages of both the foreign and the treaty port. Without paying duty, the merchant can gather a large stock of foreign goods which he receives from his native land. Mineral products—coal, iron, and ore—the basis of a new industry, are entered free of duty. The raw products of the Chinese ports—cotton, silk cocoons, hides, wool, etc.—are imported there, consumed, or manufactured and reexported as new manufactures, without paying duty. Food products from the interior—rice and barley, corn and wheat—whose export is otherwise forbidden; hundreds of other products and articles, such as burning and food oils, fruit and eggs—in fact, everything that is necessary for the daily use of the population of Tsintau—straw mats, furs, felt, silk, and tobacco; in short all the indigenous products and goods, can be imported into the German territory without paying duty.

Owing to the special customs advantages granted, the influence that the opening of a German port on the Chinese coast will have on the direct importation of Chinese products to Germany is not to be foreseen at this moment.

CHINESE MINING REGULATIONS.

Minister Conger sends from Pekin, August 12, 1899, copy of amendments to the regulations governing railways and mines in China, sanctioned and promulgated on July 30. The regulations were printed in CONSULAR REPORTS No. 223 (April, 1899), p. 556. The inclosure in the present dispatch is in the form of a memorial drawn up by the bureau of railways and mines in conjunction with the Tsungli Yamên. It reads:

In the matter of railways, on the 13th of December, 1898, the Yamên, conjointly with the mining and railway bureau, memorialized the Throne in reference to a thorough consideration having been given to the management of railways and to the need of making a distinction between those that are urgent and those that can be delayed. The suggestions made received the imperial sanction and were duly promulgated and are a matter of record.

As to mines, however, since permission was given to work them, it has been found necessary to make additions to the regulations which are here explained. The formation of stock companies by Chinese and foreigners and the permission of the Government to work mines show that the Government's desire is to treat all with the same kindly feeling, irrespective of nationality; and that not one merchant alone, but all merchants, may share in the profits of mining. Recently, Chinese and foreigners who have applied for mining concessions have (as the regulations permit all companies to survey and locate mining property) selected and located mines in a reckless manner in the prefectures and districts, without clearly defining the place or places, the district, and the extent or area of the mining property; hence, under this regulation dishonest merchants, in league with others and by false representations, could get the better of others and monopolize the mining lands, while the honest, upright, and worthy gentry and merchants would be at

a disadvantage and not be able to devote themselves to mining. This would be greatly at variance with the original purpose and intent of the law governing mining operations. It should therefore be explicitly made known that such a system must be regulated and restricted. In future (concessions already granted, which must be carried out according to the terms of agreement, excepted), when mining concessions are applied for, they will only be granted for one place in a district, not several places, and thus prevent mining operations from getting into the hands of greedy persons by their locating mines in whole prefectures and districts. Such a course will give to all a chance to reap benefits from mines.

In the former regulation (article 13) it is stated that "the control of mining companies, irrespective of the foreign capital concerned, must remain in the hands of Chinese merchants," and (article 9) "there must be at least a proportion of three-tenths of the shares owned by Chinese." When this proportion is raised, foreigners may be invited to buy shares. Although this rule was for the purpose of encouraging the people to embark in the work of mining and to open up a new line of business, still the difference between the proportion of three-tenths held by Chinese and seven-tenths held by foreigners should be taken into account, as it is to be feared that the control of mining interests would gradually get into the hands of foreigners. It is right, therefore, that the regulation should be modified and regulated in this respect.

Hereafter (existing concessions exempted), Chinese and foreigners should have equal proportions of the shares in mining companies—*i. e.*, each to hold one-half of the shares—before mining operations are commenced, thus avoiding partiality. The direction of mining companies must rest, however, in the hands of the Chinese merchants. If foreigners object to this system and ask that the direction be placed in their hands, the request will not be entertained.

Further, in the former regulation (article 6) it states:

"When applications are made by Chinese gentry or merchants to the local officials for permission to engage in mining enterprises, if their applications are not in opposition to the regulations, they may be submitted to the Government board. The local officials have no power to grant such applications. If such applications are made to the board direct, inquiries must be made through the local officials of the applicant's district, and only such applications will be granted in which the report of the local authorities is of a favorable nature."

The object of this regulation is, that Chinese merchants making application for mining concessions must first wait until a thorough investigation has been made and permission granted them before inviting foreigners to take shares in mining companies. If, before application has been made, or if application has been made and refused, they issue shares to foreigners and join them in mining operations, and on investigation being made it is found that there are difficulties in the way of carrying out the work, a useless expenditure of money for surveying, etc., will have been incurred, and a disturbance will inevitably result. It is deemed right, therefore, that this regulation should be revised as follows: In future, when Chinese merchants make application to work mines, they must wait until an investigation has been made by the officials, and if there is nothing to hinder work being carried on, and permission has been granted, they may invite foreigners to take shares and draw up a mining contract. The contract, however, must be submitted for the approval of the Government bureau before operations are commenced. Permission will not be granted to companies to work mines if they are formed before making application to the bureau to carry on mining operations.

Again, by regulation (article 8) "all enterprises sanctioned by the board must be commenced within six months of the date of the sanction, otherwise the sanction will be withdrawn, unless it can be shown that the delay was unavoidable." Under

this regulation, delays may occur on trivial excuses being brought forward, and in that case the working of the mine is done in name only, and not in reality. The time has now been fixed at ten months from the date of sanction, within which period, if operations are not commenced, the sanction will be canceled, and no excuses whatever will be considered. The local authorities will then find some other parties to undertake the enterprise, and no disputes will be allowed.

The other regulations (excepting the changes here made) are to remain in force. The mining concessions already granted will be carried out under the old regulations, in order to avoid confusion and trouble.

SILKWORMS IN CHINA.

In reply to a California correspondent,* the interpreter for the consulate-general at Shanghai, Mr. Barchet, on August 30, 1899, writes:

The domesticated silkworm (*Bombyx mori*) is extensively reared in the provinces of Chekiang, Keang-su, Szechuan, and Shantung, and to a small extent in Hu-peh, Keang-si, and Honan.

The silk industry is carried on profitably in Chekiang and Keang-su, where soil and climate are adapted to the silkworm, though even in these provinces there are localities where the silkworm does not thrive and the cocoons do not attain the size or weight they have in Ningpo, Shao-hying, Hang-chow, Hu-chow, and Wusich—regions which are famous for their silk.

The cause of this difference is hard to explain, as the careful selection of eggs, the food, climate, and treatment are to all appearance the same.

Mulberry leaves form the staple food for the silkworm, and only when the supply gives out are the leaves of *Cudrania iriloba* resorted to, which the silkworms will eat, but not so greedily; and the silk produced is inferior in quality to that from worms fed on mulberry leaves.

Though the domesticated silkworm is liable to disease, the Chinese variety is worthy of repeated trials, as it is fairly hardy when raised from healthy eggs and is decidedly superior to that of India or Japan; but sound and well-selected eggs are of paramount importance to success in such an industry. It would pay to have the eggs examined microscopically by an expert to insure that none but healthy ones be hatched. It would also be well to secure eggs from different localities (Chekiang, Keang-su, and other provinces) to find out which will thrive best under new conditions.

The wild silkworm of China and Japan is larger and is said to yield a greater amount of silk; but this is coarse and yellowish in

* To whom Advance Sheets have been sent.

color, for which reason it only commands two-thirds the price of ordinary silk.

If eggs of the wild silkworm are wanted for experiment, they can probably be procured by applying to the United States consuls at Chefoo, Shantung, or at Chungking, Szechuan (the home of the wild silkworm).

Eggs from the domesticated silkworm in the silk districts of mid-China may, as an accommodation, be procured through the consulate-general at Shanghai, provided the order is not for large quantities.

REGULATIONS FOR NEW PORTS IN JAPAN.

Under date of August 11, 1899, Minister Buck, of Tokyo, sends copy of the regulations for the ports recently opened to trade,* as follows:

The boundaries of Shimizu port are inside of the line drawn straight north from Masaki.

Those of Takatoyo, inside of a line drawn straight east from Fudo village.

Those of Yokkaichi, inside of the arc of a circle with a radius of 2½ nautical miles, drawn from the light-house as a center.

Those of Shimonoseki, inside of a line drawn from Beshimachi-no-hana, on Hiko Island, to the southeast of Ganryu Island, and on north northeast, and a line drawn northeast from Amaura-no-hana, on Hiko Island.

Those of Moji, within the area limited by a line drawn from four chains northeast of Shiroki Cape to Moji Cape, and a line drawn straight southward from the same point.

Those of Hakata, inside of a line drawn from the north end of Nokori Island to Mitsukiri, and a line drawn from Odo-hana to the south end of Nokori Island.

Those of Karatsu, between the two lines drawn straight east and west from the north end of Taka Island.

Those of Kuchinotsu, within the area limited by a line drawn straight south from Miyazaki-hana, and a line drawn straight east from Shirama Cape.

Those of Misumi, within four lines, one drawn from Seto-no-hana to Kompira-hana, on Oyana Island; another drawn from Kiwazaki-no-hana to Nozaki, on Tobashiri Island; another from Usagi-hana of the same island to Rokushiro-hana on Chisuka Island; and another from there to Togasaki, on Oyano Island.

Those of Izuhara, inside of a line drawn from Torazaki to Yarazaki or Neshaka-hana.

Those of Sasuna, inside of a line drawn from Tateba Cape to Toroku Cape.

Those of Shishimi, inside of a line drawn from Nagasaki Island to Too Cape.

Those of Nawa, inside of a line drawn from Sakihara Cape to the north end of Hinose, and a line drawn from the mouth of Arigawa to the north end of Hinose.

Those of Hamada, inside of a line drawn from Kurosaki to the west end of Uma Island and a line drawn from the north end of Uma Island (Senjojiki-hana) to Abumi Cape.

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*See CONSULAR REPORTS No. 229 (October, 1899), p. 332.

Those of Sakai, inside of the arc of a circle having a radius of 1.5 nautical miles with the light-house as its center, and west of a line drawn straight north from the west end of Sotonoe.

Those of Miyazu, inside of a line drawn from Katashima-hana to Hiki Cape.

Those of Suruga, inside of a line drawn from Akasaki to Hiruko Cape.

Those of Nanao (south bay), west of a line drawn southeast from Matsugasaki, on Noto Island, and east of the Strait of Byobugasaki.

Those of Fushiki, within the arc of a circle with a radius of 1½ nautical miles, with the light-house as its center.

Those of Odaru, inside of a line drawn from Hiraiso Cape to Kayashiba Cape.

Those of Kushiro, north of a line drawn 2 nautical miles straight west from the light-house, and east of a line drawn straight north from the west end of the aforesaid line.

Those of Muroran, inside of a line drawn from Yenrumu Cape to Hotoeishi Cape, through Daikuku Island.

JAPANESE MARKET FOR WOOD PULP.

Consul Bordewich, of Christiania, under date of August 25, 1899, writes:

I inclose translation of a cutting from a Christiania paper of recent date, from which it will be observed that the Norwegian manufacturers of wood pulp are advised, by a very well posted authority, that Japan is likely to become a good market for their product. It will also be observed that competition from America is feared. It appears to me that American wood pulp from the Pacific coast should be able to control the Japanese market.

A NEW MARKET FOR OUR WOOD PULP.

[From the Morgenposten, Christiania, August 22, 1899.]

In a report from Minister Gude regarding his mission to China and Japan, he states that in the last-mentioned country there might be found a considerable market for our exports of wood pulp for paper manufacture.

The minister believes that our enterprising exporters of wood pulp might be able to accomplish something in this branch there, as it still is new and but little worked. But all now depends on getting ahead of the Americans.

In the statistics for 1895, however, he has not found wood pulp specified as an article of import from the United States. On the other hand, he discovered several orders for wood pulp to Norwegian firms, so he reasons that the market could easily be secured and increased, if our exporters would make efforts in this direction.

In Japan, both common pulp and chemical pulp are needed; both kinds are used even now in large quantities by the largest paper mill there. The Japanese, with their great facility for imitation, have, it seems, also become desirous of manufacturing a different and finer paper than the soft and porous article which they have so far made from a pulp consisting of rice straw, papyrus, bark, etc., the same as is used in China. But for this, European wood pulp is needed, as the attempts to make wood pulp from native Japanese wood have not met with success.

CONSTITUTION OF THE COMMONWEALTH OF AUSTRALIA.

I inclose printed copies of the constitution of the Commonwealth of Australia.

This constitution has been adopted by large and substantial majorities in the colonies of Victoria, New South Wales, South Australia, and Tasmania. Queensland votes on its adoption August 2, 1899, which practically assures the federation of the foregoing colonies.

It is rumored that when federation is consummated, there will be an attempt made to inaugurate a preferential tariff in favor of Great Britain.

JOHN P. BRAY,
Consul-General.

MELBOURNE, *July 28, 1899.*

CONSTITUTION OF THE COMMONWEALTH OF AUSTRALIA.*

Federal constitution under the Crown, as finally adopted by the Australasian federal convention, at Melbourne, in the colony of Victoria, on the 16th of March, 1898, and as amended and agreed to at a conference of the prime ministers of Victoria, New South Wales, Queensland, South Australia, Tasmania, and Western Australia, which sat at Melbourne on the 28th, 30th, and 31st of January, and the 1st, 2d, and 3d of February, 1899.

PREAMBLE, PROCLAMATION, OPERATION, AND DEFINITION.

Whereas the people of [here name the colonies which have adopted the constitution], humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the constitution hereby established; and

Whereas it is expedient to provide for the admission into the Commonwealth of other Australasian colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in the present Parliament assembled, and by the authority of the same, as follows:

I. This act may be cited as the Commonwealth of Australia constitution act.

II. This act shall bind the Crown, and its provisions referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.

III. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this act, the people of [here name the colonies which have adopted the constitution] shall be united in a federal commonwealth under the name of "the Commonwealth of Australia." But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.

* An index, prepared in the Bureau of Foreign Commerce, immediately follows the constitution.

IV. The Commonwealth shall be established, and the constitution of the Commonwealth shall take effect, on and after the day so appointed. But the parliaments of the several colonies may at any time after the passing of this act make any such laws, to come into operation on the day so appointed, as they might have made if the constitution had taken effect at the passing of this act.

V. This act, and all laws made by the Parliament of the Commonwealth under the constitution, shall be binding on the courts, judges, and people of every State, and of every part of the Commonwealth, notwithstanding anything in the laws of any State; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

VI. "The Commonwealth" shall mean the Commonwealth of Australia as established under this act.

"Colony" shall mean any colony or province.

"The States" shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called a "State."

"Original States" shall mean such States as are parts of the Commonwealth at its establishment.

VII. The Federal Council of Australasia act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the parliament thereof.

VIII. After the passing of this act the colonial boundaries act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that act.

IX. The constitution of the Commonwealth shall be as follows:

Chapter I.—The Parliament.
Part I.—General.
Part II.—The Senate.
Part III.—The House of Representatives.
Part IV.—Both houses of the Parliament.
Part V.—Powers of the Parliament.
Chapter II.—The executive government.
Chapter III.—The judicature.
Chapter IV.—Finance and trade.
Chapter V.—The States.
Chapter VI.—New States.
Chapter VII.—Miscellaneous.
Chapter VIII.—Alteration of the constitution.

CHAPTER I.—THE PARLIAMENT.

Part I.—General.

(1) The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called "the Parliament," or "the Parliament of the Commonwealth."

(2) A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Common-

wealth during the Queen's pleasure, but subject to this constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

(3) There shall be payable to the Queen out of the consolidated revenue fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be £10,000.

The salary of a Governor-General shall not be altered during his continuance in office.

(4) The provisions of this constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

(5) The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election, the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

(6) There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

Part II.—The Senate.

(7) The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the parliament of the State of Queensland, if that State be an original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides, there shall be six senators for each original State. The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several original States shall be maintained and that no original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the governor to the Governor-General.

(8) The qualification of electors of senators shall be in each State that which is prescribed by this constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

(9) The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the parliament of each State may make laws prescribing the method of choosing the senators for that State.

The parliament of a State may make laws for determining the times and places of elections of senators for the State.

(10) Until the Parliament otherwise provides, but subject to this constitution,

the laws in force in each State, for the time being, relating to elections for the more numerous house of the parliament of the State shall, as near as practicable, apply to elections of senators for the State.

(11) The Senate may proceed to the dispatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

(12) The governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate, the writs shall be issued within ten days from the proclamation of such dissolution.

(13) As soon as may be after the Senate first meets and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of the third year, and the places of those of the second class at the expiration of the sixth year, from the beginning of their term of service; and afterwards, the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made in the year at the expiration of which the places are to become vacant.

For the purposes of this section, the term of service of a senator shall be taken to begin on the 1st day of January following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the 1st day of January preceding the day of his election.

(14) Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

(15) If the place of a senator becomes vacant before the expiration of his term of service, the houses of parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the houses of parliament of the State are not in session at the time when the vacancy is notified, the governor of the State, with the advice of the executive council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the governor of the State to the Governor-General.

(16) The qualifications of a senator shall be the same as those of a member of the House of Representatives.

(17) The Senate shall, before proceeding to the dispatch of any other business, choose a senator to be the president of the Senate; and as often as the office of president becomes vacant, the Senate shall again choose a senator to be the president.

The president shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

(18) Before or during any absence of the president, the Senate may choose a senator to perform his duties in his absence.

(19) A senator may, by writing addressed to the president, or to the Governor-

General if there is no president or if the president is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

(20) The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

(21) Whenever a vacancy happens in the Senate, the president, or, if there is no president or if the president is absent from the Commonwealth, the Governor-General, shall notify the same to the governor of the State in the representation of which the vacancy has happened.

(22) Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

(23) Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The president shall in all cases be entitled to a vote; and when the votes are equal, the question shall pass in the negative.

Part III.—The House of Representatives.

(24) The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:

I. A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators.

II. The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each original State.

(25) For the purpose of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous house of the parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

(26) Notwithstanding anything in section 24, the number of members to be chosen in each State at the first election shall be as follows: [To be determined according to latest statistical returns at the date of the passing of the act, and in relation to the quota referred to in previous sections.]

(27) Subject to this constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

(28) Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

(29) Until the Parliament of the Commonwealth otherwise provides, the parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

(30) Until the Parliament otherwise provides, the qualification of electors of

members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous house of the parliament of the State; but in the choosing of members, each elector shall vote only once.

(31) Until the Parliament otherwise provides, but subject to this constitution, the laws in force in each State for the time being relating to elections for the more numerous house of the parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

(32) The Governor-General in council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives, or from the proclamation of a dissolution thereof.

(33) Whenever a vacancy happens in the House of Representatives, the speaker shall issue his writ for the election of a new member, or if there is no speaker, or if he is absent from the Commonwealth, the Governor-General in council may issue the writ.

(34) Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:

I. He must be of the full age of 21 years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen.

II. He must be a subject of the Queen, either natural born or for at least five years naturalized under a law of the United Kingdom, or of a colony which has become or becomes a State, or of the Commonwealth, or of a State.

(35) The House of Representatives shall, before proceeding to the dispatch of any other business, choose a member to be the speaker of the House, and as often as the office of speaker becomes vacant the House shall again choose a member to be the speaker.

The speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

(36) Before or during any absence of the speaker, the House of Representatives may choose a member to perform his duties in his absence.

(37) A member may by writing addressed to the speaker, or to the Governor-General if there is no speaker or if the speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

(38) The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

(39) Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

(40) Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the speaker. The speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

Part IV.—Both Houses of the Parliament.

(41) No adult person who has or acquires a right to vote at elections for the more numerous house of the parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either house of the Parliament of the Commonwealth.

(42) Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule.

(43) A member of either house of the Parliament shall be incapable of being chosen or of sitting as a member of the other house.

(44) Any person who—

I. Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power; or

II. Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offense punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer; or

III. Is an undischarged bankrupt or insolvent; or

IV. Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth; or

V. Has any direct or indirect pecuniary interest in any agreement with the public service of the Commonwealth, otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons—

shall be incapable of being chosen or of sitting as a senator or as a member of the House of Representatives.

But Subsection IV does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's ministers for a State, or to the receipt of pay, half pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

(45) If a senator or member of the House of Representatives—

I. Becomes subject to any of the disabilities mentioned in the last preceding section; or

II. Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors; or

III. Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State—

his place shall thereupon become vacant.

(46) Until the Parliament otherwise provides, any person declared by this constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of £100 to any person who sues for it in any court of competent jurisdiction.

(47) Until the Parliament otherwise provides, any question respecting the qualification of a senator or a member of the House of Representatives, or respecting a vacancy in either house of the Parliament, and any question of a disputed election to either house, shall be determined by the house in which the question arises.

(48) Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of £400 a year, to be reckoned from the day on which he takes his seat.

(49) The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each house, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

(50) Each house of the Parliament may make rules and orders with respect to—

I. The mode in which its powers, privileges, and immunities may be exercised and upheld.

II. The order and conduct of its business and proceedings, either separately or jointly with the other house.

Part V.—Powers of the Parliament.

(51) The Parliament shall, subject to this constitution, have power to make laws for the peace, order, and good government of the Commonwealth, with respect to—

I. Trade and commerce with other countries, and among the States.

II. Taxation, but so as not to discriminate between States or parts of States.

III. Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth.

IV. Borrowing money on the public credit of the Commonwealth.

V. Postal, telegraphic, telephonic, and other like services.

VI. The naval and military defense of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth.

VII. Light-houses, light-ships, beacons, and buoys.

VIII. Astronomical and meteorological observations.

IX. Quarantine.

X. Fisheries in Australian waters beyond territorial limits.

XI. Census and statistics.

XII. Currency, coinage, and legal tender.

XIII. Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money.

XIV. Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned.

XV. Weights and measures.

XVI. Bills of exchange and promissory notes.

XVII. Bankruptcy and insolvency.

XVIII. Copyrights, patents of inventions and designs, and trade-marks.

XIX. Naturalization and aliens.

XX. Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth.

XXI. Marriage.

XXII. Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants.

XXIII. Invalid and old-age pensions.

XXIV. The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States.

XXV. The recognition throughout the Commonwealth of the laws, the public acts and records, and the judicial proceedings of the States.

XXVI. The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws.

XXVII. Immigration and emigration.

XXVIII. The influx of criminals.

XXIX. External affairs.

XXX. The relations of the Commonwealth with the islands of the Pacific.

XXXI. The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws.

XXXII. The control of railways with respect to transport for the naval and military purposes of the Commonwealth.

XXXIII. The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State.

XXXIV. Railway construction and extension in any State with the consent of that State.

XXXV. Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State.

XXXVI. Matters in respect of which this constitution makes provision until the Parliament otherwise provides.

XXXVII. Matters referred to the Parliament of the Commonwealth by the parliament or parliaments of any State or States, but so that the law shall extend only to States by whose parliaments the matter is referred, or which afterwards adopt the law.

XXXVIII. The exercise within the Commonwealth, at the request or with the concurrence of the parliaments of all the States directly concerned, of any power which can at the establishment of this constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia.

XXXIX. Matters incidental to the execution of any power vested by this constitution in the Parliament or in either house thereof, or in the Government of the Commonwealth, or in the federal judicature, or in any department or officer of the Commonwealth.

(52) The Parliament shall, subject to this constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

I. The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes.

II. Matters relating to any department of the public service the control of which is by this constitution transferred to the executive government of the Commonwealth.

III. Other matters declared by this constitution to be within the exclusive power of the Parliament.

(53) Proposed laws appropriating revenue or moneys or imposing taxation shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licenses, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may if it thinks fit make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

(54) The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

(55) Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

(56) A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the house in which the proposal originated.

(57) If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one house and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives, it shall be taken to have been duly passed by both houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

(58) When a proposed law passed by both houses of the Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the house in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the houses may deal with the recommendation.

(59) The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General, by speech or message to each of the houses of the Parliament, or by proclamation, shall annul the law from the day when the disallowance is so made known.

(60) A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the houses of the Parliament, or by proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

(61) The executive power of the Commonwealth is vested in the Queen, and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this constitution, and of the laws of the Commonwealth.

(62) There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councilors, and shall hold office during his pleasure.

(63) The provisions of this constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

(64) The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election, no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

(65) Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.

(66) There shall be payable to the Queen, out of the consolidated revenue fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which, until the Parliament otherwise provides, shall not exceed £12,000 a year.

(67) Until the Parliament otherwise provides, the appointment and removal of all other officers of the executive government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

(68) The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

(69) On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth, the following departments of the public service in each State shall become transferred to the Commonwealth: Posts, telegraphs, and telephones; naval and military defense; light-houses, light-ships, beacons, and buoys; quarantine. But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

(70) In respect of matters which, under this constitution, pass to the executive government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the governor of a colony, or in the governor of a colony with the advice of his executive council, or in any authority of a colony, shall vest in the Governor-General or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

CHAPTER III.—THE JUDICATURE.

(71) The judicial power of the Commonwealth shall be vested in a federal supreme court, to be called the high court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The high court shall consist of a chief justice, and so many other justices, not less than two, as the Parliament prescribes.

(72) The justices of the high court and of the other courts created by the Parliament—

I. Shall be appointed by the Governor-General in Council.

II. Shall not be removed except by the Governor-General in Council, on an address from both houses of the Parliament in the same session praying for such removal on the ground of proved misbehavior or incapacity.

III. Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.

(73) The high court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences:

I. Of any justice or justices exercising the original jurisdiction of the high court.

II. Of any other federal court; or court exercising federal jurisdiction, or of the supreme court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council.

III. Of the interstate commission, but as to questions of law only.

And the judgment of the high court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the high court from hearing and determining any appeal from the supreme court of a State in any matter in which, at the establishment of the Commonwealth, an appeal lies from such supreme court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the supreme courts of the several States shall be applicable to appeals from them to the high court.

(74) No appeal shall be permitted to the Queen in Council in any matter involving the interpretation of this constitution or of the constitution of a State, unless the public interests of some part of Her Majesty's dominions, other than the Commonwealth or a State, are involved.

Except as provided in this section, this constitution shall not impair any right which the Queen may be pleased to exercise, by virtue of her royal prerogative, to grant special leave of appeal from the high court to Her Majesty in Council. But the Parliament may make laws limiting the matters in which such leave may be asked.

(75) In all matters—

I. Arising under any treaty;

II. Affecting consuls, or other representatives of other countries;

III. In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party;

IV. Between States, or between residents of different States, or between a State and a resident of another State;

V. In which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth—

the high court shall have original jurisdiction.

(76) The Parliament may make laws conferring original jurisdiction on the high court in any matter—

I. Arising under this constitution, or involving its interpretation.

II. Arising under any laws made by the Parliament.

III. Of admiralty and maritime jurisdiction.

IV. Relating to the same subject-matter claimed under the laws of different States.

(77) With respect to any of the matters mentioned in the last two sections, the Parliament may make laws—

I. Defining the jurisdiction of any federal court other than the high court.

II. Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is vested in the courts of the States.

III. Investing any court of a State with federal jurisdiction.

(78.) The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

(79) The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

(80) The trial on indictment of any offense against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offense was committed, and if the offense was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

CHAPTER IV.—FINANCE AND TRADE.

(81) All revenues or moneys raised or received by the executive government of the Commonwealth shall form one consolidated revenue fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this constitution.

(82) The costs, charges, and expenses incident to the collection, management, and receipt of the consolidated revenue fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

(83) No money shall be drawn from the treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

(84) When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the executive government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the governor of the State with the advice of the executive council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

(85) When any department of the public service of a State is transferred to the Commonwealth—

I. All property of the State, of any kind, used exclusively in connection with

the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary.

II. The Commonwealth may acquire any property of the State, of any kind, used, but not exclusively used, in connection with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth.

III. The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament.

IV. The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

(86) On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the executive government of the Commonwealth.

(87) During the period of ten years after the establishment of the Commonwealth, and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise, not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

(88) Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

(89) Until the imposition of uniform duties of customs—

I. The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.

II. The Commonwealth shall debit to each State—

(*a*) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth.

(*b*) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.

III. The Commonwealth shall pay to each State month by month the balance (if any) in favor of the State.

(90) On the imposition of uniform duties of customs, the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs, all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect; but any grant of or agreement for any such bounty lawfully made by or under the authority of the government of any State shall be taken to be good if made before the 30th day of June, 1898, and not otherwise.

(91) Nothing in this constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

(92) On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this constitution, goods imported before the

imposition of uniform duties of customs into any State, or into any colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

(93) During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

I. The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected, not in the former, but in the latter State.

II. Subject to the last subsection, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

(94) After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

(95) Notwithstanding anything in this constitution, the parliament of the State of Western Australia may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years, respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

(96) During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

(97) Until the Parliament otherwise provides, the laws in force in any colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the government of the colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the colony, or the government or an officer of the colony, is mentioned.

(98) The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

(99) The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

(100) The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

(101) There shall be an interstate commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this constitution relating to trade and commerce, and of all laws thereunder.

(102) The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard being had to the financial responsibilities incurred by any State in connection with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the interstate commission.

(103) The members of the interstate commission—

I. Shall be appointed by the Governor-General in Council.

II. Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both houses of the Parliament in the same session praying for such removal on the ground of proved misbehavior or incapacity.

III. Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

(104) Nothing in this constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the interstate commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

(105) The Parliament may take over from the States their public debts as existing at the establishment of the Commonwealth, or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

CHAPTER V.—THE STATES.

(106) The constitution of each State of the Commonwealth shall, subject to this constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the constitution of the State.

(107) Every power of the parliament of a colony which has become or becomes a State, shall, unless it is by this constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

(108) Every law in force in a colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this constitution, continue in force in the State; and, until provision is made in that behalf by the Parliament of the Commonwealth, the parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the parliament of the colony had until the colony became a State.

(109) When a law of a State is inconsistent with the law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

(110) The provisions of this constitution relating to the governor of a State extend and apply to the governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

(111) The parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

(112) After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

(113) All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage shall be subject to the laws of the State as if such liquids had been produced in the State.

(114) A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth; nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

(115) A State shall not coin money nor make anything but gold and silver coin a legal tender in payment of debts.

(116) The Commonwealth shall not make any law for establishing any religion or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

(117) A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

(118) Full faith and credit shall be given throughout the Commonwealth to the laws, the public acts and records, and the judicial proceedings of every State.

(119) The Commonwealth shall protect every State against invasion and, on the application of the executive government of the State, against domestic violence.

(120) Every State shall make provision for the detention in its prisons of persons accused or convicted of offenses against the laws of the Commonwealth and for the punishment of persons convicted of such offenses, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.—NEW STATES.

(121) The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either house of the Parliament, as it thinks fit.

(122) The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either house of the Parliament to the extent and on the terms which it thinks fit.

(123) The Parliament of the Commonwealth may, with the consent of the parliament of a State, and the approval of the majority of the electors of the State

voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

(124) A new State may be formed by separation of territory from a State, but only with the consent of the parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the parliaments of the States affected.

CHAPTER VII.—MISCELLANEOUS.

(125) The seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and if New South Wales be an original State shall be in that State and be distant not less than 100 miles from Sydney.

Such territory shall contain an area of not less than 100 square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

If Victoria be an original State the Parliament shall sit at Melbourne until it meets at the seat of Government.

(126) The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

(127) In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

(128) This constitution shall not be altered except in the following manner:

The proposed law for the alteration thereof must be passed by an absolute majority of each house of the Parliament, and not less than two nor more than six months after its passage through both houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either house passes any such proposed law by an absolute majority and the other house rejects or fails to pass it or passes it with any amendment to which the first-mentioned house will not agree, and if, after an interval of three months, the first-mentioned house, in the same or the next session, again passes the proposed law by an absolute majority, with or without any amendment which has been made or agreed to by the other house, and such other house rejects or fails to pass it, or passes it with any amendment to which the first-mentioned house will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned house, and either with or without any amendments subsequently agreed to by both houses, to the electors in each State qualified to vote for the election of members of the House of Representatives.

When a proposed law is submitted to the electors, the vote shall be taken in such a manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either house of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

THE SCHEDULE.

Oath.

I, A. B., do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, her heirs and successors according to law. So help me God.

Affirmation.

I, A. B., do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, her heirs and successors according to law.

(NOTE.—The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.)

INDEX TO AUSTRALIAN CONSTITUTION.

The figures in the following index refer to the sections of the constitution which run consecutively from 1 to 128.

PRELIMINARY.

Preamble; binding the Crown; proclamation of Commonwealth; commencement of the act; operation, definition, and divisions of the constitution.

CHAPTER I.—PARLIAMENT.

General Provisions.—Legislative power, 1; Governor-General, appointment, salary, powers conferred, etc., 2, 3, 4; sessions, prorogation, summoning, etc., of Parliament, 5, 6, 7.

The Senate.—Composition: elected by the people, qualifications, 7, 8; method of election, 9; application of State laws, 10; failure to choose senators, 11; issue of writs, 12; rotation of senators, 13; further provisions for ratios, 14; casual vacancies in the Senate, 15; qualifications of senator, 16; election of Senate president, 17; absence of president, 18; resignation of senator, 19; vacancy by absence, 20; vacancy to be notified, 21; quorum, 22; voting in Senate, 23.

House of Representatives.—Constitution of, 24; racial disqualification of voters, 25; representatives in first Parliament, 26; change of representation, 27; duration of House, 28; electoral divisions, 29; qualification of electors, 30; application of State laws, 31; writ for general election, 32; writ for vacancies, 33; qualifications of members, 34; election of speaker, 35; absence of speaker, 36; recognition of member, 37; vacancy by absence, 38; quorum, 39; voting in House, 40.

Both Houses of Parliament.—Right of State electors, 41; oath, 42; member of one house ineligible for the other, 43; disqualification, 44; disqualification vacancy, 45; penalty for sitting when disqualified, 46; disputed elections, 47; allowance to members, 48; privileges of Senate and House, 49; rules and orders of each house, 50; legislative powers of Parliament, 51; exclusive powers of Parliament, 52;

legislative powers of the House, 53; appropriation bills, 54; tax bills, 55; appropriation of revenues or money, 56; disagreement between the houses, 57; royal assent to bills, 58; disallowance by the Queen, 59; Queen's pleasure on bills reserved, 60.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

Executive power, 61; Federal Executive Council, 62; Governor-General, 63; Ministers of State, 64; number of ministers, 65; salaries of ministers, 66; appointment of civil servants, 67; command of forces, 68; transfer of departments, 69; powers of governors vested in Governor-General, 70.

CHAPTER III.—THE JUDICATURE.

Judicial power of courts, 71; appointment, tenure, and salaries of judges, 72; appellate jurisdiction of high court, 73; appeals to Queen in Council, 74; original jurisdiction of high court, 75; additional original jurisdiction, 76; powers to define jurisdiction, 77; proceedings against Commonwealth or State, 78; number of judges, 79; trial by jury, 80.

CHAPTER IV.—FINANCE AND TRADE.

Consolidated revenue fund and expenditure charged thereon, 81, 82; money to be appropriated by law, 83; transfer of officers, 84; transfer of State property, 85; control of duties, excise, etc., 86; distribution of customs and excise revenues, 87; uniform duties of customs, 88; payment to States before uniform duties, 89; control of customs, excise, and bounties, 90; States granting bounties, 91; free trade within the Commonwealth, 92; payments to States after uniform tariffs, 93; distribution of surplus revenue, 94; customs duties of Western Australia, 95; financial assistance to States, 96; audits, 97; trade and commerce includes navigation and State railways, 98; no preference to States, 99; no abridgment of water rights, 100; interstate commission, 101; Parliament may forbid preferences by States, 102; appointment, tenure, and remuneration of commissioners, 103; State property on State railways, 104; taking over public debts of States, 105.

CHAPTER V.—THE STATES.

State constitutions and the Commonwealth constitution, 106; saving powers of State parliaments, 107; saving of State laws, 108; inconsistency of laws, 109; governors of States, 110; State may surrender territory, 111; States may levy charges for inspection laws, 112; intoxicating liquors, 113; States may not raise forces, 114; taxation of property of Commonwealth or State, 114; States not to coin money, 115; religion free, 116; rights of residents in States, 117; recognition of laws, etc., of States, 118; protection of States from invasion and domestic violence, 119; custody of offenders against laws of the Commonwealth, 120.

CHAPTER VI.—NEW STATES.

Admission or establishment of new States, 121; governments of territories, 122; how new States may be admitted, 123; formation of new States, 124.

CHAPTER VII.—MISCELLANEOUS.

The seat of Government, 125; power of Governor-General to appoint a deputy governor-general, 126; aborigines not to be counted in population, 127.

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

Mode of altering the constitution, 128.
Form of oath and affirmation follows section 128.

COMMERCIAL FERTILIZERS IN SOUTH AUSTRALIA.

The agent general of this province in London, Hon. J. A. Cockburn, some time ago mentioned in a lecture the great strides which had taken place in improvements in wheat farming in South Australia, with the result that numerous letters came from the United States asking me for information in regard to the use of fertilizers here. Upon investigation, I noticed so close a similarity of conditions in wheat farming in California and South Australia that I have thought it best to report on the subject.

For many years past, wheat has been one of the principal staple products of this province. South Australia proper (not inclusive of northern territory) contains 243,244,800 acres (380,070 square miles); of this, 191,697,920 acres—viz, nearly 79 per cent—is outside of counties, practically unknown, and wholly uncultivated. Of the remaining 51,546,880 acres, 2,604,122 were in 1898 under cultivation. Ninety per cent of the cultivated land, or 2,523,949 acres, was in cereal crops, as follows: Wheat and hay, 1,971,835 acres; oats, 12,233 acres; barley, 31,398 acres; and fallow land, 507,484 acres; the balance, 80,173 acres, being in orchards, vineyards, grass, gardens, etc.

These figures show the importance of the cereal harvests, and any improvement in their cultivation is of paramount importance to the South Australians. For years, the agricultural college, agricultural bureaus, the press, and progressive farmers had been striving to convince all cultivators of the soil of the value of artificial manures, but with small success.

In the early days of the colony, the rich virgin lands yielded for many years successive crops of from 20 to 40 bushels of wheat per acre; but gradually the average fell. New areas were then brought under cultivation, until the limit of regular rainfall was reached; and the two causes of uncertain rainfall and exhausted soil reduced the average product per acre to about 7 bushels. Experiments by the more advanced farmers gradually showed that the exhaustion was only partial, that there was still sufficient nitrogen and potash to produce many good crops, if phosphoric acid were added.

Owing to the uncertainty of the rainfall, wheat growing over large areas has to be carried on with a very small margin of profit, and most farmers were afraid to go to the expense of buying and applying phosphatic manure. This was the situation until about five years since, when the experiments of several practical farmers on dry limestone land with an average rainfall of about 15 to 17

inches showed that by the use of the American combined seed and fertilizer drills, a very small amount of phosphatic manure drilled in with the seed produced hitherto unheard of results. It took several years to convince the public that the yields reported were genuine; but the evidence was clear, and the movement spread rapidly, as will be seen from the following figures:

During 1896, 5,000 tons of fertilizers were used, which cost the farmers about $121,662.50 (£25,000); in 1897, 14,000 tons were used and cost $291,990 (£60,000); in 1898, 25,000 tons were used, representing an outlay of about $364,987.50 (£75,000). Reckoning 1 cwt. per acre, 25 per cent of the land under crop received artificial stimulant in 1898, viz, about 500,000 acres; in 1897 the acreage manured was not more than 220,000, and in 1896, only 60,000.

These figures are even more significant when it is remembered that they cover a period affected by a drought which for severity and area affected had never before been experienced. Land values have materially hardened. The low rates of interest which have been ruling for some time may in a way account for this; but the main reason is, I take it, that investors, as well as the farmers, are satisfied that the day of exhaustion of wheat land is past. It is not possible in this report to give information as to which of the manures have been best suited for certain soils. This is impossible even among the farmers here, where each has to decide what manures are required for use on his land. To this end, most practical farmers have field plots of various sizes (the average being half acres) and dress as follows:

(1) A complete manure containing suitable proportions of phosphoric acid, nitrogen, and potassium oxide.
(2) Manure containing only phosphatic acid and nitrogen.
(3) Manure containing only nitrogen and potassium oxide.
(4) Phosphatic acid.
(5) Nitrogen.
(6) Potassium oxide.
(7) Unmanured.

Sometimes, the values of the various manures containing fertilizing ingredients are submitted to comparative tests, and some ascertain the quantities of each manure necessary by a graduated series of test plots.

I will now briefly describe the various manures used.

PHOSPHATE OF LIME.

Under severe cereal cropping, phosphoric acid is most likely to become deficient here, hence 90 per cent of the manures used contain phosphates. The most universal and probably profitable form is mineral superphosphate, which is sold guaranteed to contain be-

tween 35 and 38 per cent soluble phosphate of lime, and costs users about $23.71 (£4 17s. 6d.) per long ton. The manure is chiefly drilled in with the seed, at the rate of between 80 and 112 pounds to the acre. (This will no doubt surprise people using between 2 and 3 cwts. per acre, and this method is one of the revolutions caused by the combined seed and fertilizer drill. One cwt. of super contains enough phosphoric acid to produce a 30-bushel crop, and nearly all the super put in with the seed is immediately available.) A few quotations of results will speak more emphatically than could my pen. On Yorke's Peninsula, last year, 35 pounds of seed drilled in with 80 to 90 pounds of English super gave 15 bushels per acre, while similar adjoining land broadcasted with about 75 pounds of seed, with no manure, produced 9 bushels; 52 pounds of seed, 80 pounds of English super, 16 bushels; adjoining portion broadcasted, 8 bushels; 40 pounds of Algerian oats drilled with 112 pounds of super, 2 tons hay per acre; 35 pounds red wheat, 90 pounds of super, same result. Similar results came from all over the country. During the season before last, when the crops were practically a failure all over the colony, 75 pounds of super returned 12 bushels of wheat, while crops on unmanured fallow land adjoining were not worth reaping. This is how a farmer reported to the local agricultural bureau on the profitable use of superphosphate: Extra costs per acre—manure, 97 cents; drilling, 24 cents; carting and clearing extra crop, 28 cents; extra labor carting and handling super, 6 cents; interest on money laid out on manure and drill, 10 cents; less saving of seed, 16 cents (ruling price at seed time); total extra cost, $1.52 per acre. The manured land gave 6 bushels to the acre more than that broadcasted—$3.40, or a net profit per acre of $1.88. This also shows the care and thoroughness of the South Australian farmers' tests and experiments.

Bone superphosphate, or vitriolized bone, contains about 14 per cent soluble phosphate, 20 per cent insoluble phosphate, 3 per cent nitrogen, and a small quantity of potash, and costs about $27.98 (£5 15s.) per long ton of 2,240 pounds. This manure is not much used on cereal crops, as the land does not yet, in the vast majority of cases, require nitrogen, and the 3 per cent of this fertilizer costs about $7.29 (£1 10s.) per ton. The immediate results generally are not as good as mineral super, unless the soil is deficient in nitrogen, which is rarely the case here, as explained later on.

Basic slag, or Thomas phosphate (a by-product in the manufacture of steel from iron ore with a small percentage of phosphorus in it), contains 25 to 40 per cent of phosphate of lime, and costs about £3 10s. ($17) per long ton. The value depends largely on its fineness. As usually sold here, it is guaranteed that between 80 and 90

per cent will pass through a sieve of 10,000 meshes to the square inch. This fertilizer has not given such general satisfaction as mineral superphosphate. Owing to the light rainfall, South Australian soils are usually fully supplied with lime and are deficient in moisture. On some clays deficient in lime, peaty and light sandy soils, it has paid well, and is, I think, a profitable manure only for special land.

Bone dust or meal has been used in some of the localities having a good rainfall for many years, and quite a number have bone mills; but it is very seldom used for manure, as the action of the phosphates is too slow, and not suited to a light rainfall.

NITROGENOUS MANURES.

Nitrogenous manures are not so important as phosphatic manures in wheat farming in this colony, because of—

The regular practice of fallowing.

The more rapid nitrification occurring in these soils.

The light rainfall, which renders underdrainage unnecessary, thereby avoiding the leaching of nitrates.

The habit of taking only the grain and allowing the straw to be consumed or to rot on the land.

The more thoughtful farmers are alive to the situation, and each year conduct experiments with a view of finding out how soon it will be desirable to add artificial nitrogenous manures. So far, the evidence indicates that there is no reason to think the natural supply will prove to be deficient for years.

Still, this form of manure must at some time be added to the soil if the land is to be severely cropped, and for this purpose we have nitrate of soda, sulphate of ammonia, blood manure, and nitrogenous guanos; but, as that part of the nitrates which is not immediately absorbed by the plant passes into the depths of the subsoil, a great deal of experimenting must be done before it can be decided what is the most profitable form and manner of application. Nitrogenous manures are especially beneficial to hay crops, as they greatly increase the vegetable bulk.

POTASH.

This manure, too, is rarely deficient in these soils, and, like nitrogen, must be restored to the land only if successive or frequent crops are required. Experiments are now being made with these fertilizers. The best-known potash manures are kainit, wood ashes, and muriate of potash. The latter, and also sulphate of ammonia when drilled in with the seed, it is thought, injure the struggling seed and

leave it between malting and germination proper, the braird being much weaker and thinner, which will no doubt complicate the manner of application.

The use of lime and gypsum as manure helpers and indirect manures is also studied. The effect of lime on some clay lands has been most marked; it makes the clay less sticky in wet and more crumbly in dry weather, thus rendering it more workable; it acts on the dormant fertilizing ingredients and decomposes organic matter and mineral constituents, and exerts an influence on the making of plant food. Gypsum absorbs and fixes ammonia, decomposes double silicates in the soil, and sets free the potash when that mineral is present.

BROADCASTING AND DRILLING MANURE AND SEED.

So far as Australia is concerned, I believe the method of drilling in the manure and seed together had its inception in this colony, and the practice bids fair to revolutionize the wheat-growing industry. It is no small compliment to America, however, to say that all the drills used are made either in the United States or Canada, and the development of the practice of drilling and manuring wheat has led to an immense increase in the trade between Australia and America.

The greatest drawback to the profitable use of manures when broadcasting had always been the large quantities necessary to apply and the difficulties of even distribution. By using the combined seed and fertilizer drill, both these troubles are obviated, and, instead of broadcasting 2 or 3 cwts. of superphosphate per acre, it is necessary only to drill in with the seed between 80 and 112 pounds; for the seed and manure are put in together, and most of the manure is immediately available for plant food, and 1 cwt. of good mineral superphosphate contains enough phosphoric acid for a 30-bushel crop, irrespective of that in the soil. Of course, I have been writing of a colony where 12 bushels have for some years been considered a good return and the average of unmanured crops is about 7 bushels.

CHAS. A. MURPHY,
Consular Agent.

ADELAIDE, *August 14, 1899.*

AGRICULTURAL POSSIBILITIES IN THE YUKON TERRITORY.

Under date of September 6, 1899, Consul McCook, of Dawson City, transmits the following statement, prepared by Messrs. Acklin & Morley, of that place, on the agricultural possibilities in the Yukon territory:

MESSRS. ACKLIN & MORLEY TO CONSUL MCCOOK.

ARCTIC GARDENS, *Dawson.*

SIR: In submitting to you our views and experiences of what can be grown successfully here, we do so hoping that it may prove of benefit to your Department and to the people at large. Experiments were commenced in 1898 by Mr. Acklin and proved successful with the following vegetables, viz: Radishes, lettuce, carrots, turnips, pease, ruta-bagas, and Siberian kale. For the season of 1899 we have tried both flowers and vegetables, and also some wheat, barley, and oats, which have, taken as a whole, proved very successful. We give you a list of the varieties of flowers, vegetables, and grain grown, the dates of sowing, planting, and maturing of crop, as near as possible.

SOWN IN CABIN IN BOXES, APRIL 5.

Flowers.—Pansies, China pinks, asters, cornflower, centaureas in three varieties, Stocks giant perfection, annual chrysanthemums, dahlias, nasturtiums, sweet pease, mignonette, Gabrielle calendulas, æroclimums, and helichrysums, Shirley poppies.

Vegetables.—Leeks, lettuce, parsley and celery, cauliflower-cabbage.

The foregoing plants were transplanted to the open ground from May 10 to June 1, inclusive. The flowers commenced blooming very quickly; the first pansies were picked July 4; Shirley poppies, June 27; the remaining flowers bloomed in profusion by the second week of July, excepting the dahlias which from all appearances will only make tubers this year and be in good shape for the season of 1900.

PLANTED IN THE OPEN.

On May 3, we sowed fifteen varieties of sweet pease in the open ground; they were in bloom in seven weeks from time of sowing.

Vegetables were sown outside on the following dates. We have not kept the exact date when we commenced marketing the different varieties, but it is sufficient to say that they grow as well and mature as quickly as in Vermont, Minnesota, and other Northern States.

April 24.—Radishes.

April 26.—Pease (American Wonder), prickly spinach, English mustard, Scotch kale, lettuce of all varieties.

May 10.—Carrots (Danvers half-long, and Oxheart), turnips (Flat Dutch).

May 24.—Beans (Broad Windsor, Golden wax, Wardwell's Kidney wax, etc.); pease (Little Gem, American Wonder, etc.); parsnips, rhubarb (Victoria and Stott's Mammoth), cucumber (Boston Market White Spine), onions (Danvers, Yellow, Queen, etc).

May 27.—Transplanted cabbage, leeks, cauliflower, and parsley.

We make frequent sowings of radishes and lettuce, as they mature more quickly than any other vegetables.

The following varieties of cereals have been experimented with from samples from the Dominion experimental station at Ottawa, and the results go to prove that all the cereal grains, such as wheat, rye, oats, and barley, can be grown here and the country made self-supporting:

April 26.—Oats, three kinds; harvested August 17 and 28.

May 22.—Barley, six kinds; harvested August 17 and 28.

May 22.—Wheat, five varieties; harvested August 28.

SUMMARY.

From our observations of the climate here, we see no reason why the small fruits, as strawberries, raspberries, blackberries, currants, and gooseberries, could not be cultivated profitably, as they are growing wild in the surrounding country.

Timothy, redtop, and several other grasses suitable for hay also grow wild and as luxuriant as in any part of the United States.

In the floral line, we have as pretty wild flowers, especially roses, as can be seen in any northern climate.

The duration of the season suited to vegetation is approximately five months in the lowlands and islands along the rivers, and two to four weeks longer on the hillsides with southern exposure.

SUPPRESSING THE SAN JOSÉ SCALE IN CANADA.

After prohibiting the importation of "nursery stock" into Canada,* the government of Ontario appointed a commission of three professors to investigate the ravages of the San José scale and the efficacy of the means adopted for stamping it out. The commission has made a final report, the main points of which I summarize.

The greatest infestation, they say, is in one corner of Niagara Township, near Niagara-on-the-Lake, and the township of Harwick, Kent County, in the neighborhood of the post-office of Gould. There is limited infestation at Kingsville, and smaller ones at St. Catherines, Winona, Burlington, and near Chatham. In ninety-one other cases, trees planted within the last two years were found infested. These were all destroyed, and this year's inspection failed to discover scale in any but thirteen out of the ninety-one places. The scale was found in five nurseries, but the infested stock was destroyed. The inspector estimated it would be necessary to destroy 136,200 trees to be reasonably sure of exterminating the scale.

The commissioners are in doubt as to the possibility of checking the further spread of the scale and eventually exterminating it by the destruction of the trees, as provided by the San José scale act. They advise the immediate destruction of all badly infested trees, showing incrusted trunks; the careful treatment of all others; and the granting of large discretionary powers to the inspectors in dealing with

*See CONSULAR REPORTS No. 212 (May, 1898), p. 112.

isolated cases of infestation. The work of treating them should be done by the Government, and the owner of the trees should pay for the material and board the men and horses during the time of treatment. Owners of trees not so badly infested should be required to treat them by a prescribed method once a week.

Owners of trees should be paid one-fourth of their value without discount, the fruit on the tree to be regarded as part of its value. The fumigation of nursery stock should be done under official supervision, and nurserymen should be required to attach a certificate of fumigation to every parcel of stock sold.

GUSTAVE BEUTELSPACHER,
MONCTON, *September 16, 1899.* *Commercial Agent.*

CRANBERRY CULTIVATION IN CANADA.

At a large meeting of fruit growers of New Brunswick and Prince Edward Island, which recently took place in Charlottetown, at which some important questions in reference to the growing of cranberries were considered, one of the leading fruit growers gave his experience with cranberries, of which the following is a synopsis:

Some years ago, while clearing some land, I discovered a patch of cranberries. Not knowing the value of it, I prepared the land for a crop of oats. When the oats were reaped, the vines were so healthy that I concluded there was something in them, and so I fenced the patch. After a few years, a quart was picked. The year following I gathered 2 bushels, the next year 7 bushels, and the following 20 bushels. I then began exhibiting my fruit at the exhibitions, where I carried off prizes. There are several varieties, but mine is the Cherry Bell, which takes well in the English market.

The land for planting cranberries should be worked up and sanded, the sand to be from 3 to 6 inches deep. The irrigation is important—in fact, is essential to cranberry growing. The land should always be kept damp. Before the frost comes, the patch should be flooded and kept so until the 1st of May. The berries do not thrive well when exposed to the winter's frost. If a long spell of dry weather takes place in the summer, irrigation should be repeated.

I realized $300 net for what I grew on 1 acre last year. I would like to know if there is anything else one could put an acre to that would bring the same returns. Sand will correct all weeds. As to prices, I realized 10s. to 13s. ($2.43 to $3.16) for mine in the English market, while others only received 9s. to 11s. ($2.19 to $2.68). I ship in boxes. The expense amounts to about 7 cents per box. It costs 70 cents per box for freight around by Montreal, but this should be very materially reduced now, as we have direct steam communication.

I have now 15 acres under cultivation, and all my neighbors have taken up the industry, although they laughed at me when I started mine. I can recommend the cultivation of cranberries as a profitable business, from the experience I have had.

GUSTAVE BEUTELSPACHER,
MONCTON, *September 16, 1899.* *Commercial Agent.*

WORLD'S COFFEE TRADE.

As Hamburg is one of the greatest coffee markets of the world, I would call attention to the following comparative summary, which shows the supply on hand, imports, and quantity sold and delivered in the eight principal markets of Europe and the six principal markets of North America on the dates given.

Supply on hand September 1.

Market.	1899.	1898.	1897.
	Tons.	*Tons.*	*Tons.*
Havre	93,800	72,700	49,750
Netherlands	34,250	25,850	14,700
Hamburg	31,350	38,700	23,450
England	25,750	20,650	12,650
Antwerp	16,800	16,550	9,650
Trieste	10,400	9,650	7,500
Marseilles	6,200	6,000	4,100
Bordeaux	5,150	4,600	3,250
Total	223,600	194,700	125,050
Netherlands supply unsold	4,350	9,100	2,450
Total supply September 1	227,950	203,800	127,500
Against August 1	227,900	207,400	132,200
Supply on hand January 1	224,500	170,150	.....
Import in 8 months:			
England	52,290	41,140	.....
Hamburg	86,000	127,420	.....
Antwerp	19,550	28,340	.....
Havre	65,200	63,850	.....
Bordeaux	5,210	5,650	.....
Marseilles	15,620	17,310	.....
Trieste	21,060	25,780	.....
Netherlands	48,470	53,420	.....
Total	313,400	362,910	.....
Grand total	537,900	533,060	.....
Supply on hand September 1	227,950	203,800	.....
Sold and delivered in 8 months	309,950	329,260	.....
Import	38,940	26,390	.....

Supply, importation, and consumption in the six principal markets of the United States.

Year.	Supply on hand September 1.	Imports in August.	Consumption in August.
	Tons.	*Tons.*	*Tons.*
1899	69,176	23,235	30,647
1898	55,529	22,000	21,764
1897	45,352	26,823	24,823
1896	21,294	18,828	19,588
1895	28,412	20,000	23,000

Supply, importation, and quantity of coffee sold and delivered in Europe and the United States September 1.

Year.	Supply.	Imports.	Sold and delivered.
	Tons.	*Tons.*	*Tons.*
1899	297,126	62,175	69,537
1898	259,329	48,390	51,754
1897	172,852	59,344	62,033
1896	104,944	44,553	53,068
1895	120,162	48,459	54,306

Consumption from January to July, inclusive.

Country.	1899.	1898.	1897.	1896.	1895.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Germany	94,400	100,470	82,590	78,610	77,868
France	45,770	46,970	44,490	43,830	42,190
Austria-Hungary	*23,400	26,030	22,890	22,450	21,802
Great Britain	7,880	7,600	7,460	7,330	7,610
Belgium	16,630	19,120	14,650	13,280	13,926
Switzerland	*5,750	7,260	5,110	5,390	4,850
Total, Europe	193,830	207,450	177,190	170,890	168,246
North America	213,000	214,530	177,880	146,470	153,823
Grand total	406,830	421,980	355,070	317,360	322,069

* Last month estimated.

Visible supply on hand September 1.

Description.	1899.	1898.
	Tons.	*Tons.*
Supply in the eight principal markets of Europe	227,950	203,800
En route from Brazil to Europe	34,770	38,380
En route from East India to Europe	3,450	3,000
En route from North America to Europe	180	350
Total	266,350	245,530
Supply on hand in North America	69,180	55,530
En route from Brazil to North America	26,590	24,180
En route from East India to North America	760	1,060
Supply on hand (in Rio)	18,650	22,650
Supply on hand in Santos	63,290	38,120
Grand total	440,820	387,070
Against August 1	399,140	338,230

In 1895, the consumption of coffee in Europe exceeded the consumption of coffee in America by nearly 15,000 tons. The consumption of coffee in America increased steadily until 1899, when the tables were turned and the consumption in America exceeded the consumption of coffee in Europe by almost 20,000 tons. The increase in consumption in 1899, as compared with 1895, was: In Europe, 25,584 tons; in America, 59,179 tons.

HUGH PITCAIRN,

HAMBURG, *September 16, 1899.* *Consul.*

EXPORT OF MOCHA COFFEE TO THE UNITED STATES.*

Some time since, a prominent merchant of Aden called my attention to a paragraph in an American newspaper in regard to Mocha coffee and its use in the United States. The paragraph contained this sentence: "Indeed, there is practically no genuine Mocha coffee in our market." This statement is quite unjust to American importers of the genuine Mocha coffee direct from ports of Arabia. As will appear from the following table, taken from the invoice books at this consulate and the consular agency at Hodeida, there have been invoiced for exportation to the United States during the year ending June 30, 1899, 32,156 bags (160 pounds each=5,144,960 pounds) of Mocha coffee. I should think it but reasonable that at least 5,000 bags, which are first shipped to Europe, finally reach the American market without being mixed with inferior coffees.

But it may be said by some (and I have had letters from importers of other coffees inquiring if it were not true) that the coffee shipped from here as Mocha is grown elsewhere and brought here for reshipment, as Mocha coffee, to obtain the higher price. This impression has doubtless reduced the demand for Mocha coffee to some extent. This charge was brought before the Chamber of Commerce of Aden, and, after investigating it, they issued a statement, from which I quote:

> It having come under the notice of this chamber that, owing to some parcels of coffee from Java, Singapore, and outside ports having been landed at Aden, interested parties at the other side have not scrupled to affirm that this is done with the intention of mixing with pure high-priced Mocha and Harrar varieties, which are regularly exported from this neighborhood, reference of the matter to the local authorities elicited the following reply from Lieut. Col. W. B. Ferris, first assistant political resident, under date of October 8, 1895:
>
> "I have the honor to state that all coffee received from Bombay, Singapore, Java, or the Malabar coast is bonded in the godowns of the owners at Maalla and the key lodged in the trade registration department office. When the owner desires to export, a peon of the department is sent with the key to count the bags and bring them to the wharf. As the merchant or owner can have no access to his goods unless accompanied by the peon of the department, the transfer of the inferior bean to Aden for mixing with that of Mocha or Harrar is hardly possible."

I am informed that practically the same custom prevails yet, which shows that every precaution is taken by the local authorities to prevent mixing, and from the above letter of Lieutenant-Colonel Ferris, it would seem that it is quite impossible to mix cheaper grades

* This report was written for a Philadelphia journal, which has received advance proof.

here. An examination of the custom authorities' reports shows that foreign coffees are promptly reexported to other ports, being landed here for transshipment only.

Equally stringent precautions are taken in Turkish Arabia to prevent mixing, as I am reliably informed.

Doubtless, Mocha is mixed with cheaper coffee in Europe to a great extent, and is shipped to the United States as Mocha coffee; but it is hardly possible that an importer who buys his coffee at an Arabian port could get anything but genuine Mocha or Harrar coffee.

Declared value and quantity of coffee exports from Aden and Hodeida to the United States for the year ended June 30, 1899.

Quarter ended—	Aden.		Hodeida.	
	Quantity.	Value.	Quantity.	Value.
	Bags.		*Bags.*	
September 30	4,655	$125,736.00	284	$7,254.00
December 31	4,574	136,259.90	2,649	75,096.00
March 31	6,280	178,399.05	8,059	198,379.00
June 30	3,616	114,400.19	2,039	57,302.00
Total	19,125	554,795.14	13,031	338,031.00

E. S. CUNNINGHAM,
Consul.

ADEN, *August 18, 1899.*

THE WORLD'S HOP CROP IN 1899.

Good reports are sent in from all parts of Bavaria concerning this year's hop crop.

The plants in Europe were greatly favored by the weather and are entirely free from insects. If the favorable weather continues during the picking and the late hops have enough rain, Bavaria will yield this year a quantity one-fourth greater than last year.

The Spalt district will have about the same quantity as last year; but it must be taken into consideration that this district had an exceedingly large yield in 1898. In Bavaria's largest hop-producing district—the Hallertan—the same crop is expected as in the year 1898. Some of the hops in the mountainous districts are in excellent condition, while the Hersbruck region will have a smaller yield.

In the "Aischgrund," the hops are in full bloom, but rain is much needed to ripen them.

Bohemia, especially the Saaz region, has an excellent yield. From week to week the estimates were given at higher figures; the same is true of the districts of Auscha and Dauba.

The city of Saaz, with its 1,606 acres, will have 555,520 pounds; the district of Saaz, with 11,700 acres, 7,392,000 pounds; and the county of Saaz, with 12,500 acres, 7,638,400 pounds. Therefore, the entire Saaz region will have 15,585,920 pounds. Auscha has 9,240,000 pounds; Dauba, 3,080,000 pounds. Bohemia altogether has 27,905,920 pounds.

Fine hops may be expected in the Kingdom of Wurttemberg; the Tettnang district, where early hops are grown, has already sold a good deal at the comparatively good price of $26.18 to $28.68 per English cwt. (112 pounds).

In Baden, too, the early hops are eagerly bought at $23.80 to $26.18 per cwt. The product has a beautiful color and is rich in quality.

In Alsace, general hop picking will begin now. It is estimated that an acre will yield 8 to 11 cwts. (892 to 1,232 pounds), compared with 6 to 8 cwts. (672 to 892 pounds) last year.

The province of Posen, which had such a bad crop last year, yielding only 392,000 to 504,600 pounds, is expected this year to produce 3,024,000 pounds.

The Altmark, which produces light and inferior hops, will yield a comparatively large quantity this year, namely, 3,000,000 pounds.

Belgium, which had an exceptionally bad crop last year, expects this year a quantity three to four times larger; 7,952,000 pounds are predicted in the Alost region, and 4,592,000 pounds in the Poperingh region.

In England, hops have suffered much lately from the heat, and the estimates are therefore reduced from 10 cwts. to 9 cwts. (1,120 pounds to 1,008 pounds).

In Russia, Poland is estimated to yield 1,344,000 pounds; Wolhynia; 3,808,000 pounds; the Gusslizian region, 1,232,000 pounds; and the Weichsel region, 739,200 pounds.

France will yield about 4,704,000 pounds. Of the hop crop of the United States, only vague estimates can be given. The figures sent over vary from 45,000,000 to 67,000,000 pounds. More correct estimates would be of value, as the American crop will undoubtedly influence European prices. On the whole, a rich crop and therefore low prices may be expected this year.

The estimates of the world's hop crop on August 31, 1899, are therefore as follows:

	Pounds.	
Bavaria	38,752,000 to	39,424,000
Wurttemberg	9,856,000 to	10,080,000
Baden	5,152,000 to	5,600,000
Posen and East Prussia	3,360,000 to	3,696,000
Altmark and other Prussia	3,696,000 to	3,920,000

	Pounds.	
Alsace-Lorraine	10, 864, 000 to	12, 188, 000
France	4, 492, 000 to	4, 704, 000
Bohemia	27, 888, 000 to	28, 000, 000
Upper Austria	1, 356, 000 to	1, 568, 000
Steiermark	896, 000 to	1, 080, 000
East and West Galizia	2, 128, 000 to	2, 240, 000
Mähren, Carinthia	1, 120, 000 to	1, 232, 000
Siebenbürgen, etc	504, 000 to	616, 000
Belgium and Holland	12, 330, 000 to	12, 656, 000
Russia	7, 280, 000 to	7, 392, 000
England	61, 600, 000 to	67, 200, 000
United States	44, 800, 000 to	67, 200, 000
Total	236, 074, 000 to	268, 796, 000

SIGMUND DÜNKELSBÜHLER,
NUREMBERG, *September 4, 1899.* *Vice-Consul.*

RUSSIA'S HOP INDUSTRY IN 1898.

Owing to cold weather during April and May in central and the drought in western Russia and the May bug, the yield of hops during 1898 is only 35 per cent of the average crop during the past ten years, which has caused an extraordinary increase in the price, now ranging from $15 to $17 per pood (36 pounds). This advance caused the old as well as the new stock to be put on the market. The commission men, having the first information as to the failure of the new crops, purchased the old stock at prices ranging between $7.50 to $10 per pood.

The scarcity of hops destroyed the interest in the Warsaw hop fair, there being no exhibits from the best producers. The total exhibit was but 39 tons, against 234 tons in 1897.

Official reports show the amount raised in each government to have been:

	Tons.
Volyn	1, 048
Guslitsy	323
Poland	403
Vistula	81
Other localities in central Russia	81
Total	1, 936

This does not include the lower grades raised in northern Russia.

The loss in 1898 is estimated at $309,000. There are 375 large breweries in Russia, producing 108,279,186 gallons of beer per year, which require from 3,000 to 4,000 tons of hops. The average crop yields between 4,000 and 4,500 tons, the excess being exported.

Russian hop growers have been improving the quality of their product for some years, and it is now proposed to stimulate the same by doing away with the middlemen, and a syndicate of Russian brewers has been organized to establish brewing schools in the hop-growing regions, in order to improve the quality of their beer and enable brewers to compete more successfully with the German product.

The Warsaw hop growers organized a syndicate two years since to deal directly with brewers, and have established satisfactory relations with large foreign consumers. The Government is encouraging similar organizations in other hop regions, for the mutual benefit of growers and brewers.

The Russian Government has published the following table to show the decrease in the production of hops in the leading hop-growing countries of the world:

Country and year.	Quantity.	Country and year.	Quantity.
Germany.	*Tons.*	*England.*	*Tons.*
1895	30,181	1895	27,670
1896	25,310	1896	28,100
1897	24,000	1897	20,000
Austria-Hungary.		*America.*	
1895	8,046	1895	27,250
1896	10,870	1896	10,250
1897	8,100	1897	18,000

The Russians argue that western Europe has acquired its full development; that England and Germany are limited in extent of land; and that the United States can not compete with Russia in hop growing, owing to a lack of cheap labor. Hence, there is scarcely any prospect of increased competition in the hop industry from abroad, and Russia has a surplus of both land and cheap labor, and should be able to supply the market of western Europe.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *September 19, 1899.*

EXPORT OF MALT FROM HAMBURG.

In 1897, the export of malt from Hamburg exceeded that of the preceding year by almost 33⅓ per cent. It is notable that the decrease of 27,000 double centners (2,700 tons) in the year 1898 is nearly equal to the decrease of import of the article into Brazil, which may be due to the present financial troubles of that country.

The export of malt from Hamburg has, during the last six years, increased steadily, as follows:

Year.	Weight.		Value.	
	Dble. cent.	*Tons.*	*Marks.*	
1893	97,700	9,770	3,150,000	$749,700
1894	140,996	14,099	4,290,000	1,021,020
1895	153,777	15,378	4,480,000	1,066,240
1896	204,963	20,496	5,830,000	1,387,540
1897	268,511	26,851	7,930,000	1,887,340
1898	241,802	24,180	7,130,000	1,696,940

The average export by way of the ocean has decreased in price from 30 marks ($7.14) per double centner (220.46 pounds) in 1897 to 29 marks ($6.90) per double centner in 1898.

The export of malt from Germany has developed steadily, in spite of the continual growth of the brewing industry in the different states of Central and South America, as well as in Asia, where East India and Japan especially have made wonderful progress in the art of brewing by the adoption of the newest models of refrigerating machines. Most of the malt in the market in Hamburg is exported by way of the ocean.

The decrease in the export of beer and the increase in the export of malt appear to be concomitant.

The greatest market for Hamburg's malt for the last decade has been Brazil, and it has not this year been exceeded by that to any other country, although the decrease of the export has been about 25,000 double centners (2,500 tons). A great increase in the export of malt to Japan has been noticeable during the past year. There are also great quantities exported to Cape Colony, Venezuela, the Philippines, and Cuba.

There has been some export to the Azores, Chile, Russian Asia, Ecuador, Madeira, Bolivia, and Peru.

The formerly flourishing export to Uruguay has been fluctuating.

The total export in 1898 reached 144,500 double centners (14,450 tons), against 170,600 double centners (17,060 tons) in 1897. Leaving Brazil out of the question, there has been no decrease in export of malt from Hamburg during the past year.

The export to Europe has remained about the same for 1898 as well as for 1897, being in the neighborhood of 97,000 double centners (9,700 tons). The export of malt to the Netherlands has increased. The export of malt from the Rhine provinces by way of the ocean, as well as the export via the Baltic ports to Russia, Norway, Sweden, and Denmark, has increased. The export to Great Britain has decreased, while the export to France and Spain is of very little moment.

The export from Hamburg inland mainly supplies the brewing industry of the neighboring districts. The import of malt to Hamburg is mostly by way of the Elbe from inland districts. There was comparatively very little malt imported into Hamburg from foreign ports in the past year; in fact, only 2,212 double centners (221 tons), of which the greater part—namely, 1,032 double centners (103 tons)—came from the Netherlands, while very little came from Denmark and Great Britain.

The import from the interior came particularly from Austria-Hungary, which is the most important country exporting malt to Hamburg. The small difference between the import of malt and the export of malt in Hamburg causes the brewers of both Hamburg and Altona to keep their own supplies.

For quite a time, there have existed in Hamburg extensive malt stock companies. However, most of the breweries in the neighborhood of Hamburg buy their malt direct from the producers, such as farmers, etc.

HUGH PITCAIRN,
Consul.

HAMBURG, *September 16, 1899.*

AMERICAN APPLES IN GERMANY.

The first shipment of American apples for Germany reached Bremen this month. The export season for apples has therefore begun several weeks earlier than was the case last year, and under very favorable conditions, generally speaking, as a rich harvest has been reported from every part of our country where apples are grown, whereas the apple harvest in Europe is below the average. A good result from this year's export of apples to Europe is, however, by no means certain, owing to the keen competition of the Canadian products. Not only in the United States, but in Canada and Nova Scotia, this year's apple harvest leaves a large surplus for export, and this of excellent quality. Moreover, as the Canadian producers exercise greater care in the sorting and packing of the fruit than is the case with us, and as the cost of production is less, while the freight to Europe from Canadian ports is from 10 to 12 cents lower per barrel than from American ports, the Canadian exporters find themselves more advantageously situated than our own.

The total export of apples from American ports to Europe for the season of 1898–99 was 1,221,087 barrels; in the season 1897–98 it was only 913,996 barrels; whereas in 1896–97 it amounted to 2,919,876 barrels—the highest export figures ever reached. From the present harvest returns, one may count upon about the same amount of export as in 1896–97.

The first shipments of any great importance took place in the season of 1879–80. In the following season (1880–81), the export figures had already reached 1,250,000 barrels. At that time the shipments were made almost exclusively from New York, whereas since then other ports, and notably Boston, have acquired importance in connection with the export of apples.

The largest European markets for American apples are Glasgow, Liverpool, and London. Last year, Germany took only 22,861 barrels from the United States. It is probable, however, that the shipments to this Empire will increase this year to 100,000 barrels or more.

GEO. SAWTER,
GLAUCHAU, *September 28, 1899.* *Consul.*

SHEEP AND WOOL IN GERMANY.

Under date of September 6, 1899, Consul Pitcairn, of Hamburg, transmits the following statistics on wool imports into and sheep breeding in Germany for the last twenty-eight years:

The decrease of sheep breeding and the increase of the importation of wool have a mutual bearing, and naturally inflict serious damage upon the German product.

According to the report of the Prussian Landes-Oeconomie-Collegiums, the average loss to farmers in the last twelve years, caused by the falling off in sheep breeding, amounted annually to $8,568,000. The number of sheep has decreased 12,000,000 head, thereby causing a meat-value loss of $5,712,000. In 1894, Germany imported 3,399,000 cwts. (373,890,000 pounds) of wool, and produced 400,000 cwts. (44,000,000 pounds).

In the United States, the number of sheep raised has increased from 5,000,000 to 50,000,000 head, while in Germany the number has decreased from 40,000,000 to 10,000,000 head.

Through Hamburg, wool was imported by sea as follows:

Annual imports of wool at the port of Hamburg.

Year.	Quantity.		Value.
	Dble. Cent.	*Pounds.*	
1871–1880	115,930	25,562,565	
1881–1890	379,409	83,659,684	
1891–1895	832,934	183,601,947	
1893	771,374	170,087,967	
1894	891,361	196,545,100	
1895	1,010,692	222,857,586	
1896	905,126	199,580,283	$30,690,000
1897	803,524	177,177,042	26,520,000
1898	955,166	210,614,103	30,830,000

In 1898, the wool came principally from the following countries:

Country.	Quantity.		Value.
	Dble. Cent.	*Pounds.*	
Argentine	444,197	97,945,435	$13,210,500
Australia	166,015	36,606,307	5,620,000
Cape Colony	70,456	15,535,548	2,530,000
Uruguay	40,126	8,847,780	1,088.000
Great Britain	168,274	37,104,417	6,980,000
Belgium	26,464	5,835,312	815,000
France	8,346	1,840,300	364,000

Does not this look like an opening for American wool?

THE GRAIN SITUATION IN FRANCE.

The French wheat crop may be described as very good. It is, in fact, reported by the Government to be somewhat larger than last year's abundant harvest. But for the fact that Marseilles and the surrounding district always require certain kinds of foreign grain, France would have enough wheat for domestic consumption. These special qualities are soft descriptions rich in gluten (which latter is almost entirely lacking in French-grown produce) and hard wheat destined for semolina manufacturing (which class is not produced here at all).

This year comparatively little American wheat has been imported to Marseilles, prices being held too high as compared with Russian figures. Only a stray lot now and then found occasional purchasers. If, however, the United States has—at reasonable prices—such qualities as are rare in Russia this year—that is, the glutinous varieties—a good trade could be done until next summer. Unfortunately, so the French houses state, American exporters expect people to buy everything on faith. A good many qualities grown in the United States are not known here and are not represented even by sample.

American corn sold pretty well up to six weeks ago, but now prices are reported to be entirely out of reach. If, however—and it is confidently expected to happen—the French chambers vote the "admission temporaire"—*i. e.*, allow corn to enter and go to the mills in bond, as does wheat—American white corn particularly will come into favor again, as it can be employed for sundry mixing purposes.

Heavy quantities of American oats were brought here two months ago, as the French crop was reported to be short and the Algerian crop very bad. But consumption, for unknown reasons, is very slow, so that a sharp decline has taken place in values. This is thought to be only temporary.

ROBERT P. SKINNER,

MARSEILLES, *October 4, 1899.* *Consul.*

BELGIAN REGULATIONS FOR MANUFACTURE AND SALE OF CHEESE.

Consul Roosevelt transmits from Brussels, September 27, 1899, translation of a decree published in the official journal—Moniteur Belge—of September 21, 1899, relative to the manufacture and sale of cheese in Belgium, as follows:

The cheese trade is subjected to the following stipulations independent of those of articles 454 to 457–498, 500 to 503 and 561 and 3 of the penal code relative to foods mixed with matters of a nature seriously harmful to health, counterfeited or adulterated food, tainted or decomposed alimentary products; also of those royal decrees relative to utensils, vessels, etc., used in the manufacture and sale of alimentary products and coloring matter.

ARTICLE 1. There shall be understood by cheese, for the application of the present regulation, products obtained from pure milk, skimmed milk, milk rendered sour by the aid of rennet or acidification, or any other product obtained by heating whey mixed or not with coloring matter, salt, and spices, having been subjected to pressure, fermentation, or boiling.

ART. 2. Cheese containing substances not mentioned in the above specification can not be sold or exposed for sale, kept, or transported for sale or delivery without being provided with a label, printed in plain characters, indicating the nature of the foreign substance added, as, for example, potato cheese, bread cheese, oleomargarine cheese. This stipulation is not applicable to Roquefort cheese, to which is added a small quantity of bread crumbs.

ART. 3. The following are declared injurious by the application of article 561 of the penal code, modified by article 5 of the law of August 4, 1890.

(1) Cheese made with milk, sale of which is prohibited by the regulation relative to this product.

(2) Cheese mixed with mineral matter other than salt.

(3) Cheese mixed with antiseptics.

It is forbidden to employ in the manufacture or preparation of cheese any of the above-mentioned substances or other matter prejudicial or injurious to health.

ART. 4. Recipients or wrappers containing cheese kept for sale or delivery in wholesale or partly wholesale quantity must bear the name or firm name, as well as the address or mark of the maker or seller.

ART. 5. Infringements of the preceding stipulations will be punished by fines fixed by the law of August 4, 1890, without prejudice to the application of penalties established by the penal code.

APHTHOUS STOMATITIS IN BELGIUM.

On the 8th instant (September) the veterinary inspectors of the agricultural districts of Belgium met at the Department of Agriculture and Public Works, under the presidency of the minister of said department, to study measures necessary for checking the spread of aphthous stomatitis, as the manner of contagion of the disease is still very little understood.

It was unanimously admitted that the spreading of the disease

was generally attributable to the carelessness of the farmers, who are very negligent in making prompt declaration of sick animals. The neighboring farmers, instead of seeking to avoid the contagion, visit stables where the disease is raging, handle the sick animals, and in this manner communicate the disease to their own stables.

Communal administrations also fail to strictly observe the enforcing of the sanitary police regulations, permitting the circulation of sick cattle, for fear of offending owners. Consequently, it has been considered necessary to increase the rural police and allow more discretionary power than was formerly given to the mounted police.

The measures taken concerning the prohibition of fairs and markets were thoroughly discussed as to results. The majority of the veterinary inspectors present expressed an opinion in favor of continuing fairs and markets, as the animals exhibited for sale must be visited by the veterinary surgeons and, if necessary, immediately isolated. On the other hand, it is suggested that if these fairs and markets are prohibited, clandestine markets will be held, where animals will escape examination. A number of inspectors, however, advocate enforcing suppressions of fairs and markets.

Posting notices on stables making known the presence of sick animals was recommended. A lengthy discussion on the still very doubtful question of vaccinations occupied the attention of the meeting.

GEO. W. ROOSEVELT,

BRUSSELS, *September 12, 1899.* *Consul.*

PLAN TO SELL GOODS IN EUROPE.

I am very much interested in a plan for selling goods, outlined in a letter and circular which I received from an experienced commercial traveler in yesterday's mail.

The letter and circular were sent to me, as he desires to represent upon his next journey over Europe an American manufacturer in each of the following lines: (1) Bedsteads; (2) cycles and motor cars; (3) American hardware and tools; (4) grass mowers, reapers, and binders; (5) laundry and other machinery. On the circular there are printed many testimonials and extracts from letters, showing that he is a man with whom business houses at various times have had satisfactory connections. In his circular, the writer states that he has traveled over Europe, northern Africa, and western Asia for seventeen years in the interests of different engineering firms. Since the beginning of 1897, he travels each year all over Europe (except Greece) for a number of firms whose business does

not clash, and represents these firms on "part expenses and commission," his itinerary including Holland, Belgium, Denmark, Sweden, Norway, Finland, northern Russia, central Russia, southern Russia, the Caucasus, Roumania, Austria, Hungary, Germany, Italy, Switzerland, Spain, and France. He says:

I make a contract for a year, and I engage to travel at least eight months. Last journey took about ten months, instead of eight months. I write from all principal towns and send the orders and report fully.

In regard to payment of accounts, I am very careful to obtain information on the spot through bankers and forwarding agents; but it is as well to subscribe to such firms as Confidenza, Prudenza, Eckel of Lyons and Basel, etc., by which means an official report costs 4½d. or 5d. (9 or 10 cents), instead of 2s. 6d. (61 cents) in England. My terms are £100 ($486.78) toward expenses of the whole journey and commission of 3 per cent on new accounts and 2 per cent on all old accounts from the ground I cover, but no commission wherever there are agents already. I collect accounts or do any business required. If my employers or their sons or friends choose to go on a journey with me, I undertake to teach them French, German, Italian, or Spanish in my spare time without extra charge, and to give them the full benefit of twenty years' commercial experience in continental countries. Highest references and guaranties.

I am not writing this to recommend the man, but the plan, though I have given him the names of the American manufacturers he desired.

MARSHAL HALSTEAD,

BIRMINGHAM, *September 19, 1899.* *Consul.*

TRUSTS IN GERMANY.

Kuhlow's German Trade Review and Exporter, of Berlin, in its edition of September 20, 1899, contains the following editorial on trusts in Germany, which will be of interest to the American people as showing that the United States is not the only country where trusts are formed:

RINGS IN GERMANY.

For industries in Germany, the last few years have been an era of rings. In this matter Germany has not taken the lead, but she is following with increased eagerness the example given by more advanced countries. During recent years, a number of new industrial rings was founded or their organization was planned. Thus, in 1898, there were founded the unions of iron-wire manufacturers, of woolen-goods manufacturers, of iron-goods dealers, of wall-paper manufacturers, of cast-iron manufacturers, of cloth dealers, of asphaltum manufacturers, of yarn consumers, of cotton-yarn consumers, of indigo exporters, etc.

Rings in the textile industries.—As to the effectiveness of the rings in the textile industry during the past year, the following is reported:

The union for promoting the German linen and hosiery industry has been able to develop a very satisfactory activity in the interest of its members in the political

field. The efforts of the union to promote the interests of the textile industry at Crefeld were more in the field of art industry. The union of German wall-paper manufacturers has been able to keep up to its agreement in every respect. The same applies also to the convention of manufacturers of dressmakers' busts at Berlin, which is in indirect connection with the textile branch. The newly founded "Society of Corset Manufacturers" has met with much opposition, even within its own branch of trade. As to the greater and older unions in the textile industries, it is to be remarked that the union of German wool combers and carded-wool spinners had to deal during the last year almost exclusively with the question of reducing the output, and managed to solve it in the interests of the spinners; the united vigogne spinners could, unfortunately, not effect the same in their branch. The commercial-political relation of the union of yarn consumers merits special consideration. It is known that the German spinners desire, on the conclusion of new commercial treaties, to again have the yarn duties raised. This intention is seconded by the influential protective union; but since, notwithstanding the high customs duty, it has not so far been possible to manufacture the finer yarns in Germany in competition with Great Britain, the yarn consumers fear from an increase of customs duties serious injury to their export interests. Their endeavors, therefore, are directed to preventing the increase of the duties, and if possible to obtaining facilities for the import, as they can not refrain from importing from Great Britain.

RICHARD GUENTHER,
Consul-General.

FRANKFORT, *September 22, 1899.*

PARCELS-POST EXCHANGES WITH GERMANY.

The convention recently signed between the Governments of the United States and Germany, extending to both countries reciprocally the advantages of a public parcels-post service, will be of vast importance and benefit to the retail trade and exchange of mercantile samples between the two countries, and the facilities thereby offered should be generally understood.

Hitherto, much difficulty and many complaints have been caused by a certain carelessness on the part of many American exporters in sending packages of small value, without any definite idea of what the cost of transmission might be and a consequent neglect to provide for them.

A few practical examples from recent experience will illustrate this point:

An importer in Hamburg had occasion to order from a firm in the United States a small package of fine bicycle fittings, valued at about $7. The express charges on the package to Hamburg (75 cents) had been prepaid. The local agent through whom the goods were delivered presented a bill for miscellaneous charges amounting to 7.20 marks ($1.72). The profit on the sale of the fittings by the importer was only 15 cents, so that the transaction was spoiled for him by the additional charges for transmission.

The same dealer ordered some samples of other wares from a Western firm, who shipped the goods through an express company, marked "Collect charges on delivery." The eighteen articles had been ordered at an advertised price free on board at New York, and sold to arrive at a price which yielded a small profit, the main object of the importer being to introduce the goods by sample to dealers in Germany. They arrived with a freight bill of 60 marks ($14.28), including the express charges from factory to port of shipment. This was an average of 3 marks, or 72 cents, on each article, which entailed a loss to the importer, so that the goods were refused for noncompliance with the advertised or agreed terms of sale.

Henceforth, it will be possible for shippers in both countries to send, prepaid, postal packages not exceeding 5 kilograms (10½ pounds) in weight with absolute certainty that they will be delivered without any other charge than import duty, which can be accurately calculated—all German duties being specific—and provided for by previous agreement.

FRANK H. MASON,
Consul-General.

BERLIN, *September 11, 1899.*

SAVINGS BANKS OF FRANCE.

A report has just been made to the Government on the operations of the savings banks of France for the year 1897.

The number of savings banks in France on December 31, 1896 (545), had not changed during the year, but 13 had established branches, which increased the number of branch banks to 1,181. In addition to this, 356 tax collectors had represented 60 banks in 39 departments. The number of bank books in use in December, 1897, was 6,772,582. The sum due depositors was 3,427,096,888 francs ($661,329,700). The total receipts during the year, including deposits, the interest earned for depositors, and the arrearages left by them on deposit, reached 835,016,017 francs ($161,158,091). The disbursements in money, in the purchase of Government bonds, deposits to account of old-age pension fund, and by the reduction of accounts passing the legal limit of 1,500 francs ($289.50), aggregated 799,259,989 francs ($154,257,178). The amount paid in interest was about 100,000,000 francs ($19,300,000). The sum total of deposits is nearly one-tenth less than the disbursements.

Compared with 1896, there was an increase of about 20,000,000 francs ($3,960,000) in the deposits of 1897.

A law of 1895 fixed the maximum of deposits at 1,500 francs ($289.50), interest included, except for old depositors, for whom the limit is 2,000 francs ($386).

Among depositors, the men exceed the women in number, the first footing up to 3,540,582; the second, 3,232,000. The number of minors was 95,588 boys and 92,800 girls.

There is one depositor for every 5½ persons in the country, or 179 for every 1,000 inhabitants.

Since 1835, when the enumeration of depositors was begun, the increase has been constant. At that time, the ratio was 4 per 1,000; in 1860, it was 31; in 1870, 58; in 1880, 104; in 1890, 151.

The following details are noted among the depositors:

Persons at the head of some agricultural, industrial, or commercial interest—men, 29,288; women, 19,833; farm hands, all who work for wages on farms—men, 31,476; women, 20,168; persons working in mills, factories, at any employment not exclusively agricultural, dressmakers, washerwomen, ironers, milliners, even those owning small establishments of their own—men, 37,368; women, 31,907; hired servants, valets de chambre, etc.—men, 15,641; women, 32,058; soldiers and marines, in which class are included not only men who belong to the army and navy, but gendarmes, field guards, gamekeepers, policemen, and custom-house employees—men, 4,754; women, 1,170; employees in offices, public administrative offices, conductors, letter carriers, clerks and typewriters—men, 15,516; women, 4,647; the liberal professions—men, 4,719; women, 2,663; persons without professions, including married women who have their own private bank account—men, 18,244; women, 56,978; school children—boys, 19,795; girls, 16,186.

Since 1882, 526,596 new accounts have been opened by minors, viz: Boys, 231,262; girls, 295,334. The excess among the latter is attributed to the larger number of girls employed as domestics, living in a family and not subjected to so many temptations for spending their money. It is very common for French children to have a bank account, and they will always tell you, in a somewhat boastful way, how many francs or hundreds of francs they have in the bank.

In the common schools, the children deposit with their teachers from 1 sou (1 cent) upward, and a representative of the savings bank comes around once a month to collect these little hoards. If a child deposits but 1 sou, he receives in return a very small livret, or bank book. When his deposits reach the sum of 1 franc (19.3 cents), his importance entitles him to a "grand livret." Many children, or parents for them, deposit in an endowment fund, which is to provide them with a capital of 5,000 or 10,000 francs on reaching their majority.

Our washerwoman has six children, each of whom deposits from 1 to 10 sous every week. She thinks her four girls will have enough money saved to buy them a trousseau when they get married.

Nearly every father and mother endeavors to make provision for starting their children in the world, to provide the girls with a marriage portion or with a good outfit in the way of clothing and furniture for an apartment, the boys with an education, knowledge of a trade, and means of earning a livelihood.

The amount owned by the savings banks in 1897 was 118,500,000 francs ($22,870,500), which was invested in Government bonds, real estate, and mortgages.

JOHN C. COVERT,
Consul.

LYONS, *September 4, 1899.*

GOVERNMENT ADVERTISING IN FRANCE.

France, whose national debt has been growing every day since it paid its milliards of redemption money to Germany, after exhausting apparently every conceivable means of taxation, has lately taken to advertising as a means of money making. This method had already been seized upon by numerous municipalities, which have sold the space on certain public buildings to advertisers, as the panels of city railway cars are disposed of in the United States. As the railway stations, gendarmeries, custom-houses, entrepôts, barracks, and numerous other public buildings, as well as the packages in which several kinds of monopoly goods are sold, are entirely under the control of the Government, it is evident that it has advertising facilities at its command which entirely eclipse in extent and value anything that private advertisers can offer. The value of these may be greatly enhanced by legal restrictions upon the owners of private property, preventing the sale of space for similar purposes.

The latest device of this sort—or perhaps one should say the first governmental enterprise in this field—is the "lettre annonces," or advertising post-paid letter sheet, of which I send a sample inclosed.* One-half the sheet, of ordinary letter-size paper and rather poor quality, is devoted to advertising, except a space about 4¼ by 5½ inches, reserved for the address, on which is printed a 15-centime postage stamp. The letter is written on the other half of the sheet, which is then ingeniously folded and held by a gummed flap. The whole thing is sold for 10 centimes; that is, two-thirds of the price of single-letter postage or exactly the same as a postal card.

By this means, the purchaser saves one-third the postage and gets his paper and envelope for nothing. Nominally, the scheme is worked by a corporation, "Société Anonyme;" but as it sells

* Filed for reference in the Bureau of Foreign Commerce.

postage stamps at one-third off and has its wares for sale at the post-offices and Government tobacco shops, it is practically a Government enterprise. The new system will evidently take the place of the postal card; it will decrease the sale of postage stamps, but the receipts from the advertising will enable the Government to make a substantial profit out of the project.

ALBION W. TOURGÉE,

BORDEAUX, *September 2, 1899.* *Consul.*

COST OF RUNNING AUTOMOBILES.

The following article from the London Daily Mail gives costs of operation of automobiles:

Now that at last the automobile movement may be said to have begun in earnest in this country, some amount of interest naturally centers in the question of heavy motor vehicles.

These are undoubtedly destined to replace horse-drawn wagons in the near future, and, if they had nothing else to recommend them, motor-driven wagons, etc., would appeal to firms who at present use horses solely on account of the difference in working expenses.

Mr. E. H. Bayley, of Bayley's Wagon Building Works, gave a Daily Mail representative some interesting particulars on this point yesterday. He is entitled to speak with some amount of authority, as he was chairman of the London Road Car Company, and now, in addition to employing 1,000 or so horses in his own business, is chairman of the Daimler Motor Company, and takes a keen interest in all that tends to lessen the cost of heavy traffic.

"Of course," he said, "no matter how excellent motor-driven vehicles may be, no one would look at them seriously if their use were more expensive than that of horses. That is exactly where the ultimate success of motor vehicles lies, for the tests by the Automobile Club at Richmond and, more recently, those held by the Liverpool Self-Propelled Traffic Association have shown that not only can motors do general carrying work more quickly and more efficiently than horses, but—most telling point of all—do it at less than one-seventh of the cost.

"For instance, we have a car which has been proved, under the tests already mentioned, to be capable of carrying a load of 3 tons 12 cwts. at a cost for fuel which works out a half-penny per ton mile. The total upkeep of such a vehicle, when all expenses for working, wages, fuel, repairs, insurance, etc., are taken into consideration, comes to a sum of £407 os. 3d. ($1,980.73), and this, with a carrying capacity for two hundred and sixty working-days, gives an average cost of a fraction under 3 half-pence (3 cents) per net ton per mile.

"When that is compared with the cost of horses—my experience teaches me that it varies from 9d. to 1s. (18 cents to 24 cents) per ton per mile—it can be seen what a future such vehicles have before them. In this branch of automobiles England has the lead, and presently she will not be so far behind with light carriages, for the Daimler Company is taking up the question of building racing cars to compete with those of French manufacture.

"Already, three orders for cars costing £1,000 ($4,866.50) each have been placed, which shows that English enthusiasts are prepared to support home industries if given the opportunity."

The London Daily Mail is publishing an automobile column once a week. Mr. Alfred Harmsworth, the editor of the Daily Mail, will not object, I imagine, to my stating for publication that he is an automobile enthusiast and believes it patriotic for a man of means to purchase the best types of automobiles, foreign or British. This he does in order to create a greater interest in them in this country, so that the British manufacturers shall not, for lack of examples or cash encouragement, be behind the American or French manufacturers in this respect.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *September 20, 1899.*

PRECAUTIONS AGAINST TUBERCULOSIS.

In accordance with instructions from the Department, Consul Covert, of Lyons, under date of September 13, 1899, transmits the following translation of the report of the League for the Prevention of Tuberculosis for 1898:

For every six persons, in this country, at least one dies of consumption. Of the 850,000 deaths that occur every year in France, over 140,000 are caused by pulmonary tuberculosis or phthisis, and this number, instead of decreasing, goes on augmenting every year. Hardly a family but pays to it a sad tribute. No disease, no scourge, can be compared to tuberculosis, so far as the number of the victims is concerned. All epidemics and contagious diseases combined—typhoid, varioloid, scarlatina, measles, diphtheria, cholera, etc.—do not cause half as many deaths.

We would then be acting like madmen if, knowing the means to diminish the ravages of this most terrible of our enemies, we did not as physicians make them known to the public; and if, knowing that tuberculosis may be transmitted from man to man and from animals to men, we knew means by which such transmission might be prevented or limited, we would be grossly culpable if we failed to make known such preventive measures. Science is to-day possessed of a knowledge of the means of diminishing the ravages of tuberculosis.

It is known that in the immense majority of cases a consumptive does not possess the germs of that disease at birth.

It is known, thanks to Villemin, that the greater number of the 140,000 consumptives who die yearly in France have caught the disease either in breathing the air charged with the germs of tuberculosis or, less often, by eating food which may accidentally contain those germs.

It is known that these germs of tuberculosis (bacilles de Koch) are spread by consumptives around them, each patient becoming, by his expectoration, a center of emission of these infected particles.

It is known that by certain simple precautions it is possible to destroy the greater part of these germs that are scattered through the atmosphere, and, consequently, to prevent the greater number of cases of consumption.

It is known that contact with the consumptive is in no sense dangerous; that neither his person nor his breath is poisonous; that one can talk with him for hours together, inhale his breath, live with him, sleep with him, give him the most con-

stant care and attention, without running any serious risk if certain precautions are taken, the principal one being to clean up his expectoration and not to delay destroying it until it has become dry and been taken up in the atmosphere.

It is known that by extreme cleanliness we not only prevent the patient from becoming dangerous to others, but that we do him a great service, for he is prevented from reinfecting himself and from destroying the beneficial effects of treatment which would often be successful if these precautions were rigorously enforced.

Therefore, the congress for the study of tuberculosis, where all the specialists of that disease were assembled, has issued a set of instructions to teach the public how to prevent the spread of the disease.

TUBERCULOSIS INSTRUCTIONS.

Tuberculosis is, of all diseases, that which has most victims. In large cities they make up from one-fourth to one-seventh of the mortality.

To explain this high figure, it must be understood that pulmonary phthisis is not the only manifestation of tuberculosis, as is erroneously believed. In fact, many cases of bronchial troubles, of pleurisy, of meningitis, of peritonitis, enteritis, of osseous and joint lesions, cold abscesses, etc., are of the same nature.

Tuberculosis is an infectious, parasitic disease, caused by microbes; but it can be caught by a healthy person from a patient only under special conditions, which we will state.

Besides hereditary transmission, the tuberculosis microbe enters the human organism by the air in breathing, through the digestive organs in eating, through the skin by stings, scratches, sores, wounds, ulcers, etc.

The most frequent and the most dreadful source of contagion lies in the expectoration of consumptive patients. Almost harmless while in a liquid condition, it becomes dangerous when reduced to powder. It assumes that form often when spat upon the ground, the floor, or upon a wall; when it falls on clothing, bedclothes or sheets, curtains, handkerchiefs, napkins, etc.

When dried and in powder, it is stirred by the dust cloth, the broom, brush, or carpet beater. This dust, suspended in the air, enters the respiratory organs, falls upon portions of the body, upon objects used in cooking, plates, and dishes, and thus becomes a permanent danger to persons sojourning in the contaminated atmosphere. The germs of contagion also exist in the evacuations of the patients, produced either by saliva swallowed, or by intestinal lesions so common in such diseases.

It is indispensable therefore—

To take the most careful precautions regarding the expectoration of consumptives. It should always be ejected into porcelain or glass spittoons, containing a certain quantity of liquid; and not in such matter as sawdust, bran, sand, or ashes. The handkerchief, upon which the patient should wipe his lips only, and upon which he should never spit, should be renewed every day.

The contents of the spittoons should be mixed with sawdust or some other combustible and burned, or at least emptied into the water-closet. If emptied into a yard, they may tuberculize fowls or allow microbes to spread through the air. No known disinfectant is powerful enough to rapidly destroy the tuberculous microbes contained in saliva; therefore, the contents of spittoons should be destroyed by boiling or thrown into closets. At the same time, there should be poured into the closets a solution of chloride of lime. It would be safer to mix the saliva with sawdust and burn it.

Spittoons should be used, not only in hospitals and private houses, but also in depots, barracks, and all places for public meetings.

These precautions should be taken in reference to all diseases that occasion

much expectoration, because pneumonia, inflammation of the chest, congestion of the lungs, measles, whooping cough, catarrh, certain forms of bronchitis, laryngitis, etc., may be communicated by saliva dried and converted into dust.

Clothes soiled by a consumptive patient should be left some time in boiling water before being washed.

Avoid sleeping in a room with a consumptive patient, and remain in it as little as possible, unless the above-mentioned precautions are taken in regard to saliva.

Rooms in hotels, watering places, etc., occupied by consumptives should be so furnished and carpeted that disinfection can be readily accomplished after the departure of a patient.

After the death of a consumptive, the place inhabited by him should be carefully disinfected and thoroughly aired. New tenants should see that these precautions are taken.

After the death of a consumptive, all his clothing and bed linen should be well washed before being used and the room thoroughly disinfected by sulphur vapor and washed with chloride-of-lime water.

In private as well as public houses, carriages, omnibuses, hotels, theaters, etc., sweeping ought to be replaced by washing with a cloth wet with some antiseptic solution.

The parasite of this disease may also be found in beef (above all, cow beef), poultry, rabbits, and milk. The latter should be boiled, or, better still, sterilized. Milk is sterilized by placing the vessel containing it in a tin pail full of water and letting it boil forty-five minutes. The habit of drinking blood at slaughterhouses is dangerous and without any salutary results.

Some persons have a tendency to consumption and should be especially careful; for instance, those whose relatives have died from consumption or who are feeble from privations. The abuse of alcoholic liquors is particularly favorable to consumption. Over 2,000 infants under 2 years of age die annually of consumption in Paris.

This disease is curable, where it has not advanced too far, for those who are willing to submit to long months and sometimes years of treatment and repose in special sanitariums.

AMERICAN BRIDGE IN THE SUDAN.

Ambassador Choate transmits from London, August 28, 1899, clipping from the Morning Post, giving the speech delivered by Lord Kitchener at the opening of the bridge over the Atbara River, in the Sudan, as follows:

DIFFICULTIES OF CONSTRUCTION.

I have great pleasure in declaring the Atbara Bridge open, and I congratulate you all very heartily upon the excellent work which has enabled us to add another record of construction to our railway achievement. It was not until 1896 that railway construction was commenced in the Sudan, and it is satisfactory to note that we have to-day 587 miles of line actually working north of the bridge, and 122 completed south, thus leaving 75 before reaching our goal—Khartum. During the work we have had many grave difficulties to overcome, principally caused by the military necessity of constructing the line without any proper detailed surveys. We all remember how, when pushing the line across the desert toward Abu Hamed, at the time when that place was still held by the dervishes, we had to trust the accuracy

of our direction to local information and our own good luck. I am thankful to say that even under those conditions the line was so laid out that had we to make it again in perfect peace no change would be, in my opinion, necessary.

DAMAGE BY STORMS.

Another great difficulty has been the constant washouts, which, I am sorry to see, have done so much damage. In 1896 we had 17 miles completely washed away in one day, and no sooner was the damage repaired than a further washout carried away another 10 miles of line. This year I regret to learn that, though our line to the Atbara is now so well bridged as to prevent any serious breakdown, on the unbridged 120 miles to the south so much damage has been done by storms that our work has been delayed from one and a half to two months. In a country where such violent tempests are prevalent at this time of the year, it is impossible to avoid these contretemps, which I am glad to see are being faced and overcome with the splendid spirit always shown by our officers and men.

As regards this magnificent bridge, gentlemen, I think we may fairly claim that it is a record achievement. It was only well into last October that the credits were authorized for the extension of the line to Khartum. The sites of the bridge had then to be determined, the borings, soundings, and sections of the river had to be completed, and eight solid double piers to carry the superstructure had to be sunk down to the rock below the river bed to meet the Atbara flood, which arrived twenty-five days earlier than our experience led us to expect. But, gentlemen, this did not catch us napping. Owing to the energy displayed, the piers were completed more than twenty-five days earlier than was thought possible. When the flood wave came it passed harmlessly, carrying away only the temporary bridge by which we pushed on railway construction to the southward.

PLACING THE ORDER.

In November and December, every effort was made to place the order for the superstructure in England, but it was found impossible for British firms to supply so big an undertaking in the time allowed. This matter is one of considerable regret to me personally. I think it demonstrates that the relations between labor and capital in our country are not such as to give sufficient confidence to capitalists to induce them to run the risk of establishing great up-to-date workshops with the plant necessary to enable Great Britain to maintain her proud position as the first constructing nation of the world. Well, gentlemen, where Englishmen have failed I am delighted to find our cousins across the Atlantic have stepped in. The opening of this bridge to-day is due to their energy and ability and the power they possess in so marked a degree of turning out works of this magnitude in less time than can be done by anyone else. I congratulate the American foremen and workmen on the excellent success which has crowned their efforts in the erection of this bridge in the heart of Africa, far from their homes, during the hottest months of the year, and depending solely upon the labor of men speaking a foreign tongue. They have shown by their work the real grit they are made of. I should also like to mention the excellent work of Messrs. Thomas & Co., by whom the piers have been built, and, while offering both firms our best thanks, I think, gentlemen, you must fully realize how impossible it would have been for me to carry out this railway construction in anything like the time or at anything like the cost, had it not been for the indefatigable zeal of the young officers of my own corps, who have been responsible for this great work, as well as for the untiring efforts of the Egyptian officers, noncommissioned officers, and men who have been employed on it.

TRADE NOTES FROM SOUTH AFRICA.

Trade in South Africa shows no decided decrease from that of June and July; but the conditions, not only in Cape Town, but in Johannesburg, remain very unsatisfactory, due, of course, to the political crisis. Merchants are complaining that business is practically at a standstill. Collections are bad, money scarce, and many reputable persons are out of employment. If the present situation continues, Johannesburg will be involved in commercial ruin. Prices are advancing, and it is asked if war would not be preferable to present conditions.

I am told that the opposite state of affairs is true of agriculturists and mineral producers. More gold and diamonds are being produced and exported. Good weather has favored crops.

IMPORTS AND EXPORTS.

Imports into Cape Colony for July were £1,784,166 ($8,682,643.84), as against £1,286,307 ($6,259,813.02) in July, 1898; the increase is due to specie, which has arrived in large quantities. Exports for the same month were £2,177,561 ($10,594,370.50), as compared with £1,987,099 ($9,670,217.28) in 1898. The increase is in large shipments of gold and diamonds. Of the exports above mentioned, £216,056 ($1,051,436.52) were in agricultural produce, which was valued at £295,212 ($1,436,649.20) in 1898. The output of gold for July was 478,493 ounces.

INCOME AND LAND TAX.

The government of Cape Colony has introduced an "income and land tax," owing to an estimated deficit of £333,437 ($1,622,564). The tax is estimated to produce £250,000 ($1,216,625). The colony is divided into two classes—agricultural and nonagricultural. The former pay a half-penny (1 cent) upon every £1 ($4.86) value above a value of £1,200 ($5,839.80). The latter class includes men of trades, professions, etc. The tax on incomes is 1s. (24 cents) on every £1 ($4.86) above £300 ($1,459.95). It is claimed that the agriculturist, in this land where droughts and disease among cattle and sheep prevail, should not be taxed as heavily as the townsman, who may have a cash income from other sources. The tax, it is said, will reach the rich corporations, many of the stockholders in which do not live in the colony and expend their income in other countries. It will, it is feared, fall heaviest on the middle class, whose wage or salary runs from $2,000 to $3,500 per annum, who, in this country of

expensive living—bread is dearer here than elsewhere in the world—can hardly struggle along, and to whom a tax of 5 per cent over £300 ($1,459.95) will mean hardship.

There is an outcry against the law, and an "excise tax" on liquors, wine, and brandy produced in the colony is called for. This is one of the few countries where such a tax does not exist. Cape brandy ("dope") is sold largely to the natives at a few pence per bottle and is the cause of much drunkenness.

A modification of the income and land tax is expected, to the effect that all mortgages will be deducted from the value of the land, and the income fixed at 6d. (12 cents) up to £1,000 ($4,866.50), and 1s. (24 cents) on amounts over and above £1,000. The "stamp tax" referred to in previous reports* will then be repealed, so that foreign manufacturers doing business here will pay on income and not on subscribed capital.

ADULTERATION OF COFFEE.

Stringent laws against adulteration of food stuffs, drugs, etc., are in force; the government has men out constantly buying samples which are analyzed. Those examined in 1898–99 were found to be more largely adulterated than for many years. Much prepared coffee is being imported from America; it is to be hoped that only pure coffee will be sent.

WHOLESALE PRICES OF FOOD STUFFS.

Prices of food stuffs show an advance, although it is stated that they are kept low enough to bar out foreign manufactures, particularly flour, which is selling at $3.65 per 100 pounds.

Flour meal:		
Sifted	per 200 pounds...	$6.45
Unsifted	per 100 pounds...	5.47
Bran	per 200 pounds...	1.58
Wheat (imported)	per 100 pounds...	4.62
Corn:		
Imported	per 200 pounds...	4.38
To arrive	do.....	3.89
Montevideo corn—several cargoes on sea	do.....	3.53
Corn meal (imported)	per 100 pounds...	2.43
Samp	per 196 pounds...	4.62

J. G. STOWE,
Consul-General.

CAPE TOWN, *September 5, 1899.*

*See CONSULAR REPORTS No. 223 (April, 1899), p. 699, and No. 225 (June, 1899), p. 393.

GOLD PRODUCTION OF TRANSVAAL, AUGUST, 1899.

Consul Hill transmits from Amsterdam, October 5, 1899, clipping from the London Economist of September 16, 1899, containing data respecting the production of gold in the South African Republic, as follows:

The official statement of the total yield of gold from the Witswatersrand mines for the past month was, like the returns for the two preceding months, much better than had been generally anticipated, in view of the disturbed conditions prevailing in the district and the scarcity of native labor. The amount of the precious metal produced in the month was 459,709 ounces, showing an increase of 3,235 ounces over July and of 82,798 ounces as compared with the corresponding month of last year, as will be seen from the subjoined table:

Month.	1899.	1898.	1897.	1896.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*
January	410,145	313,826	209,832	148,178
February	404,335	297,975	211,000	167,018
March	441,578	325,907	232,067	173,952
April	439,111	335,125	235,698	176,707
May	444,933	344,160	248,305	195,008
June	445,763	344,670	251,529	193,640
July	456,474	359,343	242,479	203,873
August	459,709	376,911	259,603	213,418
Total	3,502,048	2,697,917	1,890,513	1,471,794

It will be observed from the above table that in each of the past four months there has been an increase over the preceding month, which is all the more noteworthy as even in the early part of the year the supply of "boys" was short and fitful, though relatively the Rand district has always been much better off in the matter of native labor than Rhodesia. For the eight months to the end of August the increase over the corresponding period of last year amounts to 804,131 ounces, or nearly 30 per cent. In the following table the yields of the principal Rand companies is shown for the month of August, and the profits also, where the information is available:

Company.	Yield.	Profit.	
	Ounces.		
Angelo	11,654	£23,771	$115,682
Aurora West United	2,082	.....	.....
Bonanza	7,888	19,036	92,639
Buffelsdoorn	2,558	.....	.....
Champ d'Or	3,489	.....	.....
City and Suburban	(*)	(*)	.....
Consolidated Main Reef	3,193	2,109	10,263
Crown Deep	11,920	15,250	59,615
Crown Reef	13,174	24,890	121,127
Driefontein	8,815	14,206	69,133
Durban Roodepoort	6,965	.....	.....
Durban Roodepoort Deep	5,826	5,992	29,159

* Returns not yet to hand.

Company.	Yield.	Profit.	
	Ounces.		
Ferreira	12,808	£25,524	$124,213
Ferreira Deep	10,033	20,700	100,737
French Rand	4,739	.....	.....
Geldenhuis Deep	14,913	27,400	133,342
Geldenhuis Estate	11,458	24,570	119,570
Geldenhuis Main Reef	1,099	904	4,399
Ginsberg	3,337	5,656	27,525
Glencairn	7,486	8,342	40,596
Glen Deep	9,431	14,750	71,781
Henry Nourse	8,375	15,748	76,638
Johannesburg Pioneer	3,292	.....	.....
Jubilee	2,499	.....	.....
Jumpers	4,632	3,254	15,836
Jumpers Deep	8,885	10,300	50,125
Knight's	6,553	6,040	29,394
Lancaster	5,789	2,900	14,113
Lancaster West	2,946	2,025	9,855
Langlaagte Block B	2,503	.....	.....
Langlangte Deep	8,129	9,450	45,988
Langlaagte Estate	9,871	.....	.....
Langlaagte Star	2,277	.....	.....
May Consolidated	9,684	15,064	73,309
Meyer & Charlton	5,451	9,228	44,908
New Comet	6,862	9,838	47,877
New Crœsus	2,934	1,323	6,438
New Goch	4,957	6,400	31,146
New Heriot	5,937	8,386	40,810
New Kleinfontein	6,809	(*)	.....
New Modderfontein	4,213	.....	.....
New Primrose	10,886	16,004	77,883
New Rietfontein	2,509	2,237	10,886
New Unified Main Reef	1,569	(*)	.....
Nigel	3,793	(*)	.....
Nigel Deep	2,486	.....	.....
Nourse Deep	7,669	9,240	44,966
Paarl Central	2,882	.....	.....
Porges Randfontein	4,060	.....	.....
Princess Estate	3,147	1,863	9,066
Rietfontein "A"	3,491	3,539	17,223
Robinson	19,899	42,000	204,393
Robinson Deep	9,367	8,171	39,764
Robinson-Randfontein	4,157	.....	.....
Roodepoort Central Deep	2,983	.....	.....
Roodepoort M. R.	4,941	7,130	34,698
Rose Deep	17,024	24,700	120,203
Salisbury	2,110	.....	.....
Simmer & Jack	22,460	(*)	.....
South Randfontein	5,068	.....	.....
Stanhope	947	.....	.....
Treasury	5,129	9,359	45,546
Van Ryn	8,953	13,200	64,238
Village Main Reef	13,659	27,900	135,774
Wemmer	7,836	18,038	87,781
West Rand	1,596	.....	.....
West Rand Central	1,584	2,950	14,356
Windsor	1,302	818	3,981
Wolhuter	5,824	5,029	24,473
Worcester	2,107	(*)	.....
York Gold	1,927	.....	.....

*Returns not yet to hand.

The largest increase in the month's yields was one of 1,635 ounces in the case of the Ferreira Deep; but the Angelo had a gain of 814 ounces; the Henry Nourse, 748 ounces; the Ferreira, 743 ounces; the Robinson Randfontein, 615 ounces; the Langlaagte Deep, 566 ounces; the Rose Deep, 521 ounces; the New Comet, 516 ounces; and the New Goch, 461 ounces; while the Bonanza had a decrease of 974 ounces; the May Consolidated, 884 ounces; the Crown Deep, 880 ounces; the Aurora West, 721 ounces; the Robinson Deep, 635 ounces; and the West Rand, 466 ounces.

LEATHER INDUSTRY IN CAPE COLONY.

An association of colonial manufacturers recently sent a committee to call upon the prime minister of this colony to urge a special tariff on certain lines of manufactured goods that, it is alleged, are being produced in the colony and other goods that might be produced, together with the free admission of all raw materials entering into the manufacture of said goods, to the end that the present manufactures may be fostered and other industrial enterprises inaugurated. The association also desires free interchange of all South African products and manufactures throughout the states and territories of South Africa, the same to be brought about by a new "customs union." The claim is made that leather tanning, boot and shoe manufacture, saddle and harness making, furniture and cabinet making, and biscuit making which can consume large quantities of South African products are languishing for want of adequate protection against imported manufactures. Fruit preserving is mentioned as an instance where the admission of raw material free is necessary for the development of an established industry. In the opinion of the association, it is necessary for the encouragement of colonial industries that all manufactures in which colonial products or colonial labor represents 50 per cent of the total value should be carried over the several systems of railways at third-class rates.

It is claimed that the tariff on leather goods was unable to stop the importation of goods which competed with those produced here. The manufacturers say that the Americans are sending boots and shoes and leather into this country, while colonial manufacturers can not send their goods into America under a duty of 25 per cent for boots and shoes, and 45 per cent for harness. They claim that all they want is sufficient protection to place them on the same footing as their English and American competitors. The present duty in Cape Colony on boots and shoes and leather goods is 9 per cent.

In reply to the request, the prime minister stated, in substance, that South Africa would never be largely a manufacturing country, and that in the matter of boots and shoes the colonial manufacturers could not begin to supply the needs of the country. He would not

promise any action, but suggested that they appoint a committee and submit suggestions as to the tariff.

I speak of this for the reason that, within the past year, manufacturers of the United States have been paying more attention to the introduction of American-made boots and shoes, conforming to the English patterns, and have also been active in the saddlery and harness line.

J. G. STOWE,
Consul-General.

CAPE TOWN, *August 18, 1899.*

TAXATION IN MAURITIUS: BUBONIC PLAGUE.

At the last meeting of the Chamber of Commerce of Mauritius, the question of imposing an additional excise duty was discussed. The finances of the colony have made this tax necessary, owing to the great depression in the cane-sugar industry. An ordinance levying a tax of 10 per cent on all imports and exports went into effect on January 1 of this year. Within the past ten days, another ordinance has been passed levying a duty of 10 per cent on home and foreign spirits as well as on all other imported commodities.

It is alleged that this new duty is rendered necessary to meet the extraordinary expenditure in connection with efforts to stamp out the bubonic plague, which broke out in Mauritius in January, 1899, and during the past few months has assumed the nature of an epidemic. Deaths are now daily reported from all parts of the island, and the mortality in Port Louis has been greater, in proportion to population, than in Bombay. Placards have been posted over the town requesting the inhabitants to receive inoculation with the Haffkine serum, which is administered free of charge by medical officers of the government. Only a small percentage of the people, however, especially those of the lower classes, have availed themselves of the opportunity.

JOHN P. CAMPBELL,
Consul.

PORT LOUIS, *August 14, 1899.*

RAILWAY CONGRESS AT PARIS.

The Department has received from the Belgian legation, under date of New York, October 13, 1899, the programme for the sixth international congress of railways, which will meet September 15, 1900, at Paris. The subjects to be discussed are:

Section 1, ways and works.—Nature of metal for rails; rail joints; points and crossings; maintenance of way on lines with heavy traffic;

methods of dealing with snow; construction and tests of metallic bridges; transition from a rising to a falling gradient; preservation of timber; ballast; creeping of rails.

Section 2, locomotives and rolling stock.—Exhaust and draught in locomotives; locomotives for trains run at very high speed; stability of locomotive axles; banking, piloting, or double heading; purification of feed water of locomotives and use of disincrustants; use of steel and ingot iron in construction of locomotives and rolling stock; brakes and couplings of carriages and wagons; economical size of goods trucks or capacity of freight cars; electric traction; automotor vehicle.

Section 3, traffic.—Train lighting; handling and conveyance of broken loads; long-distance goods trains; economical interlocking apparatus; automatic block system; signals for repeating visible signals; use of the telephone; safety appliances for preventing collisions arising from runaway wagons; sorting by gravitation; distribution of rolling stock.

Section 4, general.—Accounts; railway clearing houses; grouping of goods; technical education of railway servants—appointment and promotion; cooperative societies and stores under railway management; facilities for customs inspection.

Section 5, light railways.—Influence of light railways on national wealth; means of developing light railways; main lines crossed by light railways; conveyance of farm produce to stations on main railways; carriages and wagons for light railways; warming of carriages on light railways.

The programme gives the names of those who will report on the various subjects. Reports from United States representatives will be made in regard to nature of metal for rails; ballast; exhaust and draught in locomotives; locomotives for high-speed trains; use of steel and ingot iron in the construction of locomotives and rolling stock; brakes and couplings; capacity of freight cars; electric traction; conveyance of broken loads; automatic block system; railway clearing house; technical education of railway servants; conveyance of farm produce to stations on the main railways.

Other matters which will be discussed are: Use of liquid fuel in locomotives; international passenger fares and goods tariffs; suburban passenger traffic; organization of funds for providing pensions to employees; benefit societies of Russian railways (old-age pensions, sick and accident funds, mutual loan arrangements, etc.).

The United States Government is invited to send delegates to the congress.

NOTES.

Recent Imports into Hawaii.—The special agent at Honolulu, Mr. Sewall, sends, under date of October 13, 1899, a statement of imports for the month of September and for the first nine months of 1899, as compared with the same period of last year, as follows:

Description.	September, 1898.		September, 1899.		
	United States.	All other.	United States.	All other.	Total.
Honolulu:					
Dutiable	$60,505.21	$102,348.89	$101,897.11	$173,924.95	$275,822.06
Bonded	6,050.16	4,545.44	3,378.33	13,056.29	16,434.62
Free by treaty	290,364.56	.....	607,137.43	.....	607,137.43
Free by civil code	54,042.90	87,059.73	453,060.61	144,920.77	597,981.38
Hilo	7,972.30	.....	114,420.03	.....	114,420.03
Kahului	29,805.52	.....	57,947.65	.....	57,947.65
Mahukona	.....	.....	21,063.95	.....	21,063.95
Kailua	4,551.31	.....	.....	.....	.....
Total	453,291.96	193,954.06	1,358,905.11	331,902.01	1,690,807.12

Total for 9 months of 1899	$13, 667, 372. 60
Total for 9 months of 1898	7, 360, 580. 56
Increase	5, 306, 792. 04
Total for 9 months of 1899	13, 667, 372. 60
Total for year 1898	11, 650, 890. 81
Increase in 9 months of 1899 over year 1898	2, 016, 481. 79

Development of New Caledonia.—Commercial Agent Wolff, of New Caledonia, under date of August 2, 1899, says that not only the colony at large, but the city of Nouméa, have entered upon an era of prosperity. At a recent meeting of the municipal council, $130,000 was voted for public improvements. The mayor, M. Charles Loupias, requested Mr. Wolff to invite American firms to tender for the construction of a market hall. Mr. Wolff forwarded the information to a San Francisco firm. The stone quay, the finest in the Pacific, is well under course of construction, and the plant for the electric lighting of the town is being erected. An automobile service has been inaugurated for conveying the mails around the island, and the governor is authority for the statement that $700,000

will shortly be available for the construction of a dry dock at Nouméa, which enterprise Mr. Wolff also hopes to secure for an American firm.

Under date of August 4, 1899, Mr. Wolff adds that in consequence of the favorable reports made by experts during the year as to the mineral resources of New Caledonia, a number of foreign capitalists have been attracted to the colony. The Caledonia Copper Mining Company (the fifth of the kind), with a capital of $3,700,000, has recently been formed in London to exploit the inexhaustible Pilou mines, in the north. The current of exportation of mineral ores to the United States has begun. A cargo of nickel is ready for a British ship from South Africa, which is to stop on its way to the United States. Other consignments will be effected in the near future.

American Railway Machinery in India.—Consul-General Patterson writes from Calcutta, September 14, 1899:

On the 31st of August last I made a report on the railways of India,* in which I called the attention of our manufacturers of railway supplies to this market for their products. I now inclose the following clipping from the Englishman of this city of the 13th instant, as forcibly corroborating the statements made in that report:

RAILWAY MACHINERY FROM AMERICA.

The steamer *Falls of Keltie* arrived at Rangoon on the 4th instant from New York, with twenty locomotives and seventy-five railway carriages and other parts of railway machinery for the Burma railways. Mr. J. J. Ellis, of Messrs. Barber & Co., New York, has been specially sent out by this firm, which has chartered the *Falls of Keltie* and is the agent of various well-known American iron companies, to superintend the work of delivering the machinery. This is the first voyage of the *Falls of Keltie* to Rangoon. She left New York on the 24th of June and Alexandria on the 18th of July, arrived at Aden on the 3d of August, Bombay on the 13th, and Colombo on the 27th, and left again for Rangoon on the 29th. She left New York with the largest quantity of machinery that was ever put aboard one boat, viz, railway material for Alexandria, Bombay, and Rangoon, and American oil for Colombo.

Substitute for Celluloid.—Consul Liefeld writes from Freiburg, September 23, 1899:

In a recent issue of a Black Forest newspaper, a new substance closely resembling celluloid is described in a short article, the translation of which I submit:

In London, a new substance has been produced by the boiling of untanned leather in oil, which has first of all the property of being a good electrical insulator, but beside this can be used for manifold purposes.

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*See "Railways of India," *ante* p. 560.

This new material, to which the inventor has given the name "marloid," can be polished on both sides, and in its structure resembles horn, and can be pressed or worked into any form whatsoever, either directly after the boiling process or later, after the hardened hide has been made soft and elastic by being dipped into a salt or alum bath. The boiling process lasts from one to ten minutes, depending on the quality of the leather.

By means of polishing, this material can be made almost transparent, and it can also be given different degrees of hardness, so that a substance is obtained which can be kneaded, embossed, stamped, pressed, drawn, and twisted into any desired shape, style, or design.

From this description, it is evident that out of marloid any and all articles can be manufactured which up to this time have been made from celluloid, horn, or similar material.

Belgian Artificial Stone.—Consul Atwell, of Roubaix, on October 17, 1899, writes:

An artificial stone from Belgium has recently been introduced into the French market which is said to have four times the force of resistance of French free stone and which has nearly all of the properties of Cobestang granite. It has been tried in the Malines arsenal and is found to be insensible to the action of cold, absorbs only 6 to 7 per cent of water, even after a long dry spell, and can not be crushed under a pressure of 40 kilograms (88.184 pounds) to the square centimeter. This artificial stone is manufactured at Uccles, near Brussels, in the following manner: Eighty parts of extremely clean and dry coarse sand are mixed with twenty parts of hydraulic lime reduced to a fine, dry dust; this mixture is put into an iron box, which is plunged into a boiler of water, and this is hermetically closed. During seventy-two hours, the cooking goes on under a pressure of 6 atmospheres, the temperature being maintained at 165°. At the end of this time, the iron box contains a perfect homogeneous mass of stone, which rapidly hardens upon exposure to the air. The most varied colors are given to this stone, and its manufacture costs only 2 cents per cubic foot.

Nettle Fiber in Germany.—Consul Sawter, of Glauchau, under date of September 26, 1899, says:

Nettle fiber has of late come greatly into favor in the manufacture of fine yarns and tissues. In Germany, there are factories which use these fibers both in spinning and also for ulterior purposes. In nettle-spinning alone, over 10,000 spindles and some hundred workmen are employed. The raw material is imported almost exclusively from China, whence 3,000 to 4,000 double cwts. (661,500 to 802,000 pounds) are annually sent to Germany. Nettle fiber produces one of the finest tissues obtainable from any known kind of

vegetable fiber. In view of the importance which this seems likely to attain in connection with the weaving industries, it is intended to introduce the cultivation of nettles, if possible, into the Kameroons. The idea is to prepare the products of this experimental culture at the place where they are obtained, and test them in German factories. Should favorable results follow from these experiments, it is intended to organize nettle-growing enterprises on an extensive scale.

German Trade and Industry.—Consul Winter writes from Annaberg, October 11, 1899:

Germany's export trade continues to increase. Through recent treaties with Japan and Spain, exporters look for a still greater gain.

The figures for the first half of the present year make an extraordinary showing, and this result is based upon the increased exports to the United States. Germany also sold much more to Great Britain during the first half of 1899 than during the same period of 1898. During the first half of 1899, one hundred and eighty-two joint-stock companies were organized in the German Empire. Their capital was invested for the most part in establishing new banks, in opening mines, in electrical undertakings, and in building breweries. The new Dortmund-Ems Canal, connecting the Elbe and the Rhine, giving cheap transportation to the inland cities of Germany in connection with ocean freights, will undoubtedly stimulate foreign commerce in a large degree.

German Emigration.—Consular Agent Harris sends from Eibenstock, September 25, 1899, the following statement, issued by the imperial statistical bureau, showing emigration from Germany to foreign countries for the first six months of 1899:

Province.	Number of emigrants.	Province.	Number of emigrants.
Posen	1,257	Schlesia	301
Brandenburg	1,068	East Prussia	299
Hanover	928	Hesse-Nassau	283
Bavaria	794	Palatinate	265
Schleswig-Holstein	732	Province of Saxony	253
West Prussia	682	Alsace-Lorraine	161
Kingdom of Wurttemberg	596	Oldenburg	160
Kingdom of Saxony	533	Hessen	159
Rhine Province	490	Mecklenburg-Schwerin	114
Pomerania	389	From different parts of the Empire	1,376
Baden	387	Total	11,544
Westphalia	317		

Strikes in Germany.—Consul-General Guenther, Frankfort, September 25, 1899, writes:

During the period from January 1 to June 30, 1899, there were 574 strikes inaugurated in Germany, affecting 2,910 establishments and 89,048 employees. They were distributed mainly among the following industries:

Industry.	Strikes.	Employees affected.	Establishments affected.
	Number.	*Number.*	*Number.*
Mining	15	10,013	27
Quarrying	46	4,538	112
Metal manufacture	42	3,463	83
Chemicals	2	257	2
Machinery	49	11,986	79
Lumber	3	249	4
Textiles	48	13,385	66
Paper	2	598	2
Leather	12	1,712	57
Wood carving, etc.	61	3,224	324
Articles of food	29	3,527	37
Clothing	31	4,457	579
Building	207	27,945	579
Commercial	8	607	19
Transportation	13	2,403	49

Diamonds in Amsterdam.—Consul Hill sends the following from Amsterdam, October 18, 1899:

The diamond trade in Amsterdam shows the effect of the war in its inactivity. Prices of rough diamonds, which for some time have been noted as rising at intervals of two months, have been marked up twice within the last eight days. The rise must restrict sales, since manufacturers will find it difficult to buy at the advanced prices.

Under date of October 24, Mr. Hill adds:

The main reason for the great scarcity and high prices is the unusual demand from the United States and continental buyers. The whole output of the De Beers mines is sold in March of each year; this year, the syndicate had to consent to an advance of 35 per cent. There is great difficulty in obtaining supplies, scarcely any parcels of less value than £5,000, or $25,000, being sold.

Swiss Demand for American Coke.—Consul Gifford, of Basel, on October 20, 1899, says:

I transmit to the Department, for the benefit of American manufacturers, a communication from the Aluminium Industrie-Actien

Gesellschaft, of Neuhausen, Switzerland, of which the following is a translation:

To the American Consulate, Basel.

There has been such an increase in the price of coal and coke on the continent of Europe within the last year that there seems to be a possibility of importing these materials with advantage from the United States.

As our establishment uses more than 10,000 tons of coke yearly, we should be glad to establish relations with several American factories producing coke of acknowledged excellence, or with large business houses dealing in the same article.

We shall therefore be obliged if you will send us a few addresses.

This may open a new and extensive field to American commerce.

Ankylostomiasis* in Coal Mines.—Under date of August 29, 1899, Consul Roosevelt, of Brussels, transmits the following:

According to a royal decree published in the Moniteur Belge of August 27, 1899, the sections of the councils of industry and labor representing the coal industry are convened to meet to study a preliminary project elaborated by the Government with a view to check the progress of "ankylostomiasis" in Belgian coal mines. The committee of each division will transmit to the Minister of Industry and Labor the agreements which have been adopted. In accordance with proposed regulations, a medical service and appropriate laboratory will be established and equipped for the purpose of thorough investigation of ankylostomiasis. Workmen will be obliged to submit to all hygienic measures ordered by the Government and by this special service.

Italian Showrooms in Port Said.—J. F. Monaghan, vice and acting consul, writes from Chemnitz, October 18, 1899:

German technical papers are calling the attention of local manufacturers to the efforts which Italy is making in the East to procure a market for her goods. She has established a display house at Port Said, wherein she shows to the Eastern world the cotton products of the looms of Lombardy, the porcelain and glassware of Milan, the silk goods of Como, etc. This enterprise was established but two months ago and has been a complete success in every respect. The manager, a man well posted, has his living apartments free,

*Mr. Walcott, Director of the United States Geological Survey, informs the Bureau of Foreign Commerce that ankylostomiasis is a disease produced by *Ankylostomum-duodenale nematoid*, a worm found in northern Italy and Egypt, parasitic in upper part of small intestine of man. It produces a fatal form of anæmia which has been named Egyptian chlorosis, Saint Gothard tunnel disease, etc.

with an allowance of £20 ($97.33) a month, and receives 50 per cent of the net earnings. Orders worth 40,000 francs ($7,720) have already been taken. This plan has been suggested to our export associations by a number of United States consuls.

Calico-Printing Trade Combination.—Consul Boyle writes from Liverpool, October 16, 1899:

The Liverpool Daily Post of the 16th of October prints the following from its Manchester correspondent:

The long-discussed combination of firms engaged in the calico-printing trade of Lancashire and Scotland has been accomplished. It embraces the majority of the firms in both districts, and the capital will probably reach the enormous sum of between £7,000,000 and £10,000,000 ($34,065,500 and $48,665,000). It is understood that stocks and valuations were taken at the end of last month, and that all the firms concerned have accepted the valuations. For a long time, the calico-printing industry has not joined in the general prosperity of the trade, owing to competition and the cutting of prices, and it is believed the combination will exercise a beneficial influence on the market.

Catalogues Free of Duty in Canada.—Consul Ledoux, of Three Rivers, on October 24, 1899, says:

A dispatch received this day from Ottawa announces that an order in council has been passed providing that bona fide catalogues and price lists of goods in any country beyond the limits of Canada, not exceeding three to any one address, shall be admitted through the mails or other conveyance free of customs duty, provided, however, that such catalogues and price lists shall not be held to include almanacs or advertising periodicals or printed matter designed to advertise the sale of goods by any person in Canada.

This innovation will greatly benefit United States exporters issuing large catalogues, as the Canadian recipient of these catalogues had to pay 15 cents per pound duty, and in many cases refused to pay this amount and left them with the customs officers.

Iron Bedsteads in Canada.—Consul Martin, of Amherstburg, on October 30, 1899, says:

I desire to call the attention of manufacturers of iron and brass bedsteads to the opportunity offered in Canada for the establishment of one or more factories for their manufacture. Many of the dealers throughout Canada are at the present time buying their iron and brass goods in the United States and paying the duty of 30 per

cent, while the iron and brass from which they are made are free of duty under item 617 of the Canadian customs act of 1897, viz:

Tubes, rolled iron, not welded or joined, under 1¼ inches in diameter; angle iron, 9 and 10 gauge, not over 1½ inches wide; iron tubing, lacquered or brass covered, not over 1½ inches in diameter—all of which are to be cut to lengths for the manufacture of bedsteads, and are to be used for no other purpose; and brass trimmings for bedsteads, when imported by or for manufacturers of iron or brass bedsteads to be used for such purposes only in their own factories, until such time as any of the said articles are manufactured in Canada.

Improved Steamship Service with Para.—Consul Kenneday, of Para, under date of October 13, 1899, writes:

Beginning in November, 1899, the two lines of steamships plying between this port and the United States—the Booth Steamship Company, Limited, and the Red Cross Line of steamers—have changed their schedule so as to leave Para for New York on the 6th, 16th, and 26th, instead of the 4th, 14th, and 24th, of each month. Commencing next month, a ten days' service will be established by said companies between Manaos and New York. On the 1st of November, 1899, a ten days' service will also be established between here and Galveston, Tex., by the same fleets that are now operating between Para and New York. The Spanish Steamship Company, established between Habana, Cuba, and Europe, has sent an agent here to complete arrangements for the extension of said line, touching at Para on the return voyages to Europe.

Quarantine in Brazil.—Consul Furniss, of Bahia, on September 12, 1899, writes:

The Brazilian Government has instituted at this port, in conjunction with the other ports of Brazil, a strict quarantine for the prevention of the introduction of the bubonic plague by ships proceeding from Portuguese ports. To establish the quarantine at this port, the cruiser *Tupey* has been sent here and is now at anchor in the Brazilian man-of-war anchorage, shown on all charts of this harbor. All vessels entering the harbor are required to display signals showing port of departure and call and to answer any signals displayed by the *Tupey* before proceeding to the anchorage, otherwise they will be fired at by blank shot, to be followed by ball, provided they do not heave to. At night, it is not advisable for vessels to come farther into the harbor than midway between the Fort São Maria and Fort São Marcello do Mar lights.

Tariff on Corn in Venezuela.—Consul Goldschmidt sends from La Guayra, September 20, 1899, copy of a decree issued by the Government of Venezuela under date of September 9, concerning reduction of duties on several articles of food. The decree, adds the consul, may have considerable importance in relation to indian corn, which has been almost prohibited. Many importers have already received shipments by steamship *Caracas*, which arrived on the 17th, bringing several consignments of corn. This is the first American corn received at La Guayra for several years.

The decree sets forth that, in view of the lack of rain and the consequent shortage of crops, corn, beans, and frijoles introduced through the custom-houses will be exempt from the payment of import duties during sixty days. Rice in the grain will pay only 10 centimos of the bolivar (1.9 cents) per kilogram, or 2.2 pounds.

The same information has been furnished the Department by Consul Plumacher, of Maracaibo, under date of September 19, 1899.

Rice Crop of Japan.—Consul-General Gowey sends from Yokohama, September 9, 1899, a clipping from the Japan Herald, from which it appears that from all the prefectures throughout the country, except Shiga, Hiroshima, and Kumamoto, the year's yield of rice is estimated at 41,841,993 koku (214,649,424 bushels), the figures showing a decrease of 11.7 per cent and an increase of 6.5 per cent, as compared with those of the preceding year and of ordinary years.

Quay at St. Malo.—Under date of September 28, 1899, Consul Thackara, of Havre, reports that St. Malo is about to expend 1,000,000 francs ($193,000) in building quays along one of its basins. As the quays are to be built of stone, he adds, it is not likely that Americans could compete with the French, who know just what stone is required, where to procure it, the best ways of transporting it, the prices to be paid, etc.

Business Conditions in Christiania.—Under date of October 7, 1899, Consul Bordewich, of Christiania, writes:

The Christiania money market continues very close, and many failures have occurred among business men. It would seem advisable for American firms doing business with importers in my district to be cautious. Of course, there are a great many solid firms with which it is entirely safe to deal, but all new connections should be investigated.

Demand for Iron Theaters in Spain.—Consul Bartleman, of Malaga, under date of September 22, 1899, says:

I have been requested to obtain from firms in the United States prices, plans, and specifications for a cheap and pretty theater, with a seating capacity of about six hundred, the same to contain one or two balconies, and to be constructed of sheet or corrugated iron. Any communications addressed to me will be delivered to the parties interested.

American Corn in Russia.—The chargé d'affaires ad interim at St. Petersburg, Mr. Peirce, writes, under date of October 11, 1899, that a telegram from Reval announces the arrival of the first steamer with American indian corn. Eight more are expected.

Duties in Zanzibar.—Acting Consul Sarle writes from Zanzibar, September 14, 1899, that an ad valorem duty of 5 per cent will be imposed from September 15, 1899, on all imports except coins, coal, hippopotamus teeth, ivory, rhinoceros horns and hides, rubber and tortoise shells.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
E. Schneegans, Saigon	Aug. 29, 1899	Rice market	Department of Agriculture.
Do	Sept. 12, 1899	....do	Do.
R. F. O'Rourke, Sydney, N. S. W.	Sept. 18, 1899	Dairying	Do.
R. Wildman, Hongkong	Sept. 8, 1899	....do	Do.
J. G. Foster, Halifax	Oct. 23, 1899	....do	Do.
J. T. Williams, Sierra Leone	Oct. 13, 1899	....do	Do.
S. B. Everett, Batavia	Sept. 25, 1899	....do	Do.
G. C. E. Weber, Nuremburg	Oct. 23, 1899	....do	Do.
M. H. Twitchell, Kingston, Ontario.	Oct. 31, 1899	Crop report	Do.

FOREIGN REPORTS AND PUBLICATIONS.

Trade Openings in Syria.—A correspondent writes from Aleppo to the British Trade Journal, London, October 1, 1899, in regard to the value—as markets—of the populous centers of northern Syria. The present governor-general is endeavoring to develop the country agriculturally. He has employed an able engineer to report on the best methods of reclaiming the vast regions in the districts of Aleppo and Adana, the immense water courses of the Euphrates, the Orontes, and the Tigris, and the parched, uncultivated lands on the borders of the Great Syrian Desert from their present condition of neglect. The engineer has suggested the employment of windmills, with the result that, to use the words of the correspondent, "on all sides, symmetrically constructed and picturesque steel towers are rapidly springing up, crowned with steel windmills, which have been carefully chosen, after exhaustive experiments, in preference to wooden mills, and may be seen at work throwing out broad streams of water for irrigating purposes or almost uninterruptedly grinding corn to serve as food. These windmills are almost exclusively furnished by American firms. In this respect, Germany appears no better able than England to compete."

After deploring that this trade should be monopolized by Americans, the writer says, in substance:

For irrigating implements to be used along the rivers, the prospects are much more satisfactory for England, and in this instance I am happy to state that a trial order for a bucket pump has been given to an Essex firm, which in the event of its answering requirements, will be very largely adopted. This may also be said of centrifugal and belt-link pumps, although in every instance French and American makers are keenly disputing the market, and in many cases quoting lower than British houses.

A severe restriction upon the importation of irrigating appliances was the heavy customs duty—8 per cent ad valorem—which had to be paid on all goods entering. The governor-general has been instrumental in having this charge entirely removed. All goods and machinery for irrigating purposes are now allowed to pass the custom-house free of duty. The effect of this has been to give a fresh impetus to the irrigating business. I am also informed from an official source that the same concession was obtained from Constantinople for everything that concerns agricultural implements. It is with regret that I see this market almost wholly monopolized by foreign firms.

Plans and estimates for the lighting of the port of Alexandretta by acetylene gas are now being considered by the governor-general. England will probably obtain the contract for the first installation of acetylene-gas plant to be put up in Syria. It is certain to be followed by large orders for other towns.

There is a growing demand for galvanized-iron roofing tiles, roofing felt, etc. French and Swiss makers command the market. The municipality of Aleppo has the money ready for an order of considerably over £500 ($2,500) for galvanized roofing tiles for a new public hospital and a guardhouse.

Iron beams, iron building requirements, pipes, and water fittings are being imported in large quantities, thanks to the impetus being given to the construction of public buildings, bridges, houses, and new roads, and the use of water pipes in irrigation.

German Chemical Discoveries.—The following paragraphs are taken from a British Foreign Office report from Berlin, reviewing German trade in 1898:

SULPHURIC ACID.

A great change seems imminent in the manufacture of sulphuric acid. The Baden Aniline Soda Factory has patented a most important improvement in the production of this substance. By this new process there is an immense saving in fuel, and the expensive platina apparatus is no longer necessary. More important still is the fact that no saltpeter is required by the new process. Saltpeter is of such enormous value for agricultural and technical purposes that any economy in its use must be welcomed, the more so as the saltpeter fields will, in the course of time, be exhausted.

AMMONIA.

There is a report of a newly discovered process in the production of ammonia. Up to this date, gas meters have been used in the production of this union of hydrogen and nitrogen; but by the new process, a calcium metal is heated in nitrogen to 1,200°, and the result is a brown slag, from which, by watering, ammonia and slacked lime are obtained. Much is expected of this process, which is, however, on account of the high price of calcium, at present too dear. It is possible that calcium may be obtained cheaper by the electrolytic process. It is worthy of mention that lately, in the Argentine Republic, borax layers have been discovered in forty-eight places of the Department of Tumbaya, 130 kilometers (80.7 miles) from the capital.

ARTIFICIAL INDIGO.

Among new manufactures, that of artificial indigo is decidedly the most important. Artificial indigo is a perfect substitute for the natural product. This has, of course, led to the establishment of numerous factories for its production. This fact, together with the low price of the natural indigo, will eventually cause some difficulties in the trade.

CALCIDUM.

In many manufactures, it is a necessity to work with a liquid which does not freeze. Till the present time, it was only possible to lower the freezing point of water by an admixture of salt or glycerin. At last a liquid has been found which lowers the freezing point of water to 56°. It is called "calcidum." Calcidum being 500 per cent cheaper than glycerin, that expensive substance is no longer necessary. By mixing this substance with water, one can lower the freezing point to any desired depth. In the manufacture of acetylene gas this discovery is of immense importance. The police regulations existing here forbid the generation of acetylene gas in houses or in massive buildings; it is only, then, in lightly built sheds, in which water easily freezes, that this manufacture is permitted.

By the use of calcidum, the manufacture can be carried on in the open air with only a light roof to protect it from snow. In many other industries similar advantages can be obtained by its use, and among experts much is hoped as to the progress in manufactures to be made by the new discovery. Calcidum is a colorless liquid, heavier than water, hydroscopic, noninflammable (rendering stuff so impregnated also noninflammable), and does not eat into metal. The patent bureau of Richard Lüdors, in Görlitz, sends small samples gratis on application.

SUGARINE.

A new sweetening substance "methylbenzolsulfinid," or "sugarine," which is said to be 500 times as sweet as sugar, has been discovered; the process of production seems to be somewhat complicated.

Industries in the Transvaal.—The Deutsches Handels-Archiv, Berlin, October, 1899, has the following:

The manufacturing industry in the Transvaal, which imports the greater part of raw products from abroad, has been fostered by special protective duties imposed by the Government.

In the year 1897, the following factories existed in the Republic:

Description.	Number.	Boilers.
Cement manufactory	1	2
Distilleries	4	13
Breweries	7	13
Manufactories of explosives	3	19
Mills	69	71
Brick manufactories and kilns	12	14
Printing offices	9	11
Machine manufactories, forges, etc	11	16
Mineral water and ice manufactories	19	26
Bakeries	4	4
Manufactories of tobacco	9	9
Cyanide manufactory	1	1
Bottle manufactory	1	3
Lime mills and kilns	4	5
Tannery	1	2
Steam laundries	7	11
Sawmills	22	52

The establishment of a wool spinning and weaving mill and of a candle manufactory is projected.

French Warehouse in Madrid.—The Centralstelle für Vorbereitung von Handelsverträgen (Berlin, October 9, 1899) announces that the French chamber of commerce in Madrid has opened a warehouse with the intention of making the exchange of goods between France and Spain more active. The new institution comprises three divisions. The first contains a sample collection of Spanish articles intended for export to France; the second, the

most important articles of import into Spain which do not come from France; the third shows Spanish imports of French origin. The members of the French chamber of commerce in Madrid are allowed to exhibit here their catalogues, samples, etc., for the information of purchasers.

Iron Bedsteads in Turkey.—The British Trade Journal, London, October 1, 1899, quotes from a report by the Austro-Hungarian consulate at Constantinople the statement that iron bedsteads are beginning to be used more extensively in Turkey, the demand from the provincial markets likewise advancing. The imports are valued at about $75,000 per year. They are mostly supplied by England and cost from $1.75 to $170. The line generally used costs from $3 to $5, and is 3 to 4 feet wide and 6½ feet long.

Commercial Travelers in Brazil.—A British Foreign Office report (No. 510, miscellaneous series) has the following information in regard to taxes on commercial travelers in Brazil. The taxes, it appears, vary in different States. In Rio de Janeiro, there are none; in Pernambuco, there is a State tax of 200 milreis (about $32) leviable on each traveler; and in Ceara, 270 milreis ($43) as State and municipal tax. In Bahia, a State tax of about 1,000 milreis ($160) is imposed and collected yearly, no matter how many times the traveler may come there from other Brazilian ports, but is enforced every time he comes from a foreign country. In Para, the annual fee is 1,000 milreis ($160). In Amazonas, the annual tax is 300 milreis ($48). In Maranhão, the annual fee levied is 200 milreis ($32). In São Paulo there is no tax. In Rio Grande, a municipal tax of 500 milreis ($80) is imposed on commercial travelers, but not seriously enforced. In Petotas, a similar tax of 500 milreis is rigorously levied. In Porto Alegre, the tax amounts to 1,000 milreis ($160).

INDEX.

VOL. LXI—NOS. 228, 229, 230, AND 231.

Advertising, Government, France, 640.
Africa, East:
  Gold Coast, commerce, 347.
  Lourenço Marquez, boots and shoes, 316.
Africa, South:
  Candy, United States, 315.
  Cape Colony, 323.
  Cape Colony, leather industry, 650.
  Cape Colony, life insurance, 448.
  Cape Colony, pumps, 446.
  Cape Town to Kimberley, 317.
  Commercial development, 317.
  Fruit trees, 490.
  Huts, portable, 446.
  Importers, South African Republic, 100.
  Kimberley diamond mines, 317.
  Natal, 322.
  Orange Free State, 320.
  Tinware, 339.
  Trade notes, 445, 489, 646.
  Transvaal, broom factory, 323.
  Transvaal, diamond production, 444.
  Transvaal, duties, increase, 445.
  Transvaal, German interests, 490.
  Transvaal, gold output (1899), 489.
  Transvaal, gold production (August, 1899), 648.
  Transvaal, railways, 341.
  United States trade opportunities, 442.
African Republic, South, importers, 100.
Agricultural conditions, Ontario, 506.
Agricultural exports, United States, German view, 202.
Agricultural implements, United States, New South Wales, 438.
Agricultural machines and tools, German tariff, 124.
Agricultural possibilities, Yukon territory, 620.
Agriculture:
  Denmark, protection, proposed, 510.
  Mexico, 49.
  Tunis, 345.
  Yukon territory, 481.
Air brakes, Westinghouse, Russian railways, 404.
Alaska, mining, 483.
Aluminium, Great Britain, 215.
Amazon Valley, resources and trade opportunities, 29.
American-Asiatic Association, Japan, 332.
American-German balance of trade, 126.
Amsterdam, diamonds, 657.
Anchovies, Scandinavia, 249.
Anderson, G. B. (consul, Grenoble), kid gloves and kid skins, France, 367.
Ankylostomiasis in coal mines, Belgium, 658.
Antwerp:
  Art exhibition, 184.
  Ivory market, 452.
Aphthous stomatitis, Belgium, 634.
Apples, dried, United States, new, in France, 398.
Apples, United States, Germany, 631.
Argentine Republic:
  Imports from United States, 21.
  Judicial reforms, 57.
  Steamship line, proposed, 466.
  Tariff, proposed, 58.
  Tasajo, or dried-beef, industry, 575.
  Trade, 21.
  United States vs. German trade, 507.
Art exhibition, Antwerp, 184.
Artificial paving stones, Germany, 337.
Artificial stone, Belgium, 655.

Assay offices, British Columbia, 174.
Athens, merchants, 144.
Atwell, W. P. (consul, Roubaix):
Flax disease, Belgium, treatise, 502.
Hosiery and knit underwear, France, 366.
Stone, artificial, Belgium, 655.
Textile plant, new, France, 330.
Textile plants, Russia, 227, 510.
Tuberculosis, new remedy, 177.
Wheat crop, France (1899), 232, 494.
Australia:
Commonwealth, constitution, 595.
Federal movement, 104.
Australia, South, fertilizers, commercial, 615.
Automobiles:
Cost of running, England, 641.
Exposition, international, Berlin, 517.
Motor vehicles, Shanghai, 417.
Taxes, Belgium, 511.
Avery, W. L. (consul, Belize), railroad, British Honduras, proposed, 468.
Aymé, L. H. (consul, Guadeloupe):
Boilers, engines, etc., demand, Guadeloupe, 566.
Exchange, Guadeloupe, 182.
Hurricane, Guadeloupe, 478.
Azores:
Mail service, new, 181.
Russian oil, 181.

Bahia, manganese mining, 266.
Balance of trade, German-American, 126.
Bank, United States, Caracas, proposed, 176.
Banking statistics, Ireland (1898), 143.
Barber chairs, United States, Germany, 141.
Barcelona, tramways, electric, 532.
Barchet, S. P. (interpreter, Shanghai), silkworms, China, 592.
Barnes, C. E. (vice and deputy consul, Cologne), pawnbroking, Germany, 371.
Bartleman, R. M. (consul, Malaga), theaters, iron, demand, Spain, 662.
Beaupré, A. M. (consul-general, Guatemala):
Duties, cattle and tobacco, Guatemala, 476.
Beaupré, A. M.—Continued.
Flour, Guatemala, 342.
German-Guatemalan trade-mark convention, 507.
Bedsteads, iron:
Canada, 659.
China and Japan, 413.
Turkey, 666.
Beef, dried, or tasajo industry, Argentine Republic and Uruguay, 575.
Beef, fresh, United States, Belgium and Germany, 196.
Beet-lifting machine, prize for, Germany, 392.
Beet-sugar campaign, 1898–99, Germany, 393.
Beets, Russia's acreage (1899), 408.
Belgian enterprise, Egypt, 502.
Belgium:
Ankylostomiasis in coal mines, 658.
Antwerp art exhibition, 184.
Antwerp ivory market, 452.
Antwerp-San Francisco steamship service, 508.
Antwerp to Portland, Me., new steamship line, 508.
Aphthous stomatitis, 634.
Automobiles, taxes, 511.
Brussels, medical congress, 498.
Cattle and fresh beef, United States, 196.
Cattle, tuberculosis, 500.
Cheese, regulations for manufacture and sale, 634.
Flax disease, treatise, 502.
Fuel, new, 172.
Ghent, exposition, 222.
Iron and steel wanted, 342.
Lawn mowers and incubators, automatic, demand, 342.
Live animals, transportation, 501.
Refrigerators, demand, 511.
Stone, artificial, 655.
Tolls, 510.
Trade (first five months, 1899), 136.
Vehicle regulations, 501.
Bell, G. W. (consul, Sydney):
Federal movement, Australia, 104.
Implements, United States agricultural, New South Wales, 438.
Bergen, business firms, 245.
Berlin, motor-carriage exposition, international, 517.

Berths, covered, shipyards, England, 109.
Beutelspacher, G. (commercial agent, Moncton):
Cranberry cultivation, Canada, 622.
Forestry inspection, Canada, 505.
San José scale, Canada, suppressing, 621.
Bilbao, tramways, electric, 434.
Bleached cotton goods, Paraguay, 569.
Blom, J. (vice and deputy consul, Copenhagen):
Danish agriculture, protection proposed, 510.
Danish exchange rate on New York, 182.
Boardman, C. A. (commercial agent, Rimouski), railway enterprise, Canada, 505.
Boilers, demand, Guadelcupe, 566.
Bombay, tramways, 561.
Bonds, Guatemala, 335.
Boots, Lourenço Marquez, 316.
Bordeaux, railway, electric, 398.
Bordewich, H. (consul, Christiania):
Christiania, business conditions, 661.
Fruit, United States, Norway, 139.
Paper mills, Norwegian, failures, 342.
Wood pulp, market, Japan, 594.
Borneo, petroleum, 90.
Boyle, J. (consul, Liverpool):
Calico-printing trade combination, England, 659.
Canadian competition, Great Britain, 189.
Cotton trade, reforms, 116.
Brakes, Westinghouse air, Russian railways, 404.
Brazil:
Amazon Valley, resources and trade opportunities, 29.
Bahia, manganese mining, 276.
Commercial travelers, 666.
Foreign judgments, 58.
Letters rogatory, tax, 336.
Para, steamship service with United States, improved, 660.
Platinum, iridium, and osmium, 147.
Quarantine, 669.
Railway ties forgotten, 176.
Rails, bids, 53.
Brazil—Continued.
Southern, 571.
United States trade, 26.
Brick factory, Mexico, 51.
Bridges:
Across the Rance, France, proposed, 526.
Railway, India, 435.
United States, Sudan, 644.
British Honduras, railroad, proposed, 468.
British trade reports, South America, 506.
Brittain, J. I. (consul, Nantes):
Iron, United States, market, France, 213.
Steamer, new French, 531.
Street-car strike, Nantes, 396.
Brodowski, E. Z. (consul, Solingen), German vs. United States pound weight, 169.
Broom factory, Transvaal, 325.
Brundage, F. M. (consul, Aix la Chapelle), trusts, Germany, 498.
Brunot, H. S. (consul, St. Etienne):
Accidents to workmen, France, 163.
Fruit, roadside, Europe, 395.
Brush, H. W. (consul, Clifton):
Canada, canal problem, 64.
Mining project, Canada, 483.
Brussels, medical congress, 498.
Bryan, C. P. (minister, Petropolis):
Letters rogatory, tax, Brazil, 336.
Rails, bids, Brazil, 53.
Bubonic plague, Mauritius, 651.
Buchanan, W. I. (minister, Buenos Ayers):
Tariff, proposed, Argentine Republic, 58.
Trade, Argentine Republic: Imports from United States, 21.
Buck, A. E. (minister, Tokyo):
Companies, foreign, Japan, 288.
Copyright law, Japanese, operation, 343.
Customs regulations and fees, Japan, 277.
Diplomatic and consular officers, Japan, 293.
Foreigners, Formosa, treatment, 421.
Japan, foreigners, regulations, 423.
Japan, new treaties, 179.

Buck, A. E.—Continued.
Japan, regulations relating to foreigners, 289.
Japanese treaties, operation, 285.
Ports, new, Japan, regulations, 593.
Tonnage dues law, Japan, 292.
Buildings and streets, construction, Germany, 390.
Business firms, Bergen, 245.
Byington, A. H. (consul, Naples), walnut crop, Italy, 510.

Cacao culture, Ecuador, 250.
Calcutta, trade, 436.
Calico-printing trade combination, England, 659.
Campbell, J. P. (consul, Port Louis):
Taxation, Mauritius: Bubonic plague, 651.
United States trade, Mauritius, 183.
Camphor monopoly, Formosa, 415.
Canada:
Bedsteads, iron, 659.
British Columbia, assay offices, 174.
Canal problem, 64.
Canals, cost, 173.
Catalogues free of duty, 659.
Cranberry cultivation, 622.
Customs, collection, 334.
Dawson City, money-order department, 504.
Dawson City, notes, 65, 333.
Dawson City, telegraph, 504.
Forestry inspection, 505.
Mining project, 483.
Ontario, agricultural conditions, 506.
Ontario, mica, 485.
Ontario, peat, 487.
Ontario, railway, new, and mining enterprise, 486.
Petroleum and naphtha, 504.
Platinum, iridium, and osmium, 145.
Railway enterprise, 505.
San José scale, suppressing, 621
Victoria, harbor improvements, 107.
Yukon territory, agricultural possibilities, 620.
Yukon territory, mining, 503.
Yukon territory, mining and agriculture, 480.
Canadian competition, Great Britain, 189.
Canals:
Canada, cost, 173.
Canada, problem, 64.
Germany, new, 523.
Candy, United States, South Africa, 315.
Cape Colony, 323.
Leather industry, 650.
Life insurance, 448.
Pumps, 446.
Cape Town to Kimberley, 317.
Car, street:
Strike, Nantes, 396.
System, electric, Hamburg, 213.
Caracas, bank, United States, 176.
Caraguata, Paraguay, 571.
Cars, postal, wanted, France, 181.
Catalogues free of duty, Canada, 659.
Cattle:
Belgian, tuberculosis, 500.
Duties, Guatemala, 476.
Russian, England, 385.
United States, Belgium and Germany, 195.
Caughy, C. M. (consul, Messina), oils, Sicilian essential, advice to importers, 225.
Celluloid, substitute, Germany, 654.
Chairs, United States, barber, Germany, 141.
Chambers of commerce, Germany, 207.
Cheese, regulations for manufacture and sale, 634.
Chefoo, trade (1898), 296.
Chemicals, Germany, 379.
Chester, F. D. (consul, Budapest):
Debts, collection, Hungary, 455.
Hungary, commercial policy, 210.
Children's wages, Germany, 508.
Chile:
Shipments to, 473.
Soda nitrate, 493.
China:
Chefoo trade (1898), 296.
Debt, national, 326.
Freight facilities from United States Atlantic ports, 416.
Grain export prohibited, 180.
Iron bedsteads, 413.
Kyao-chau, customs regulations, provincial, 273.
Kyao-chau, tariff regulations, 589.
Likin tax on rice, 180.

China—Continued.
Mining regulations, 590.
Mining, Szechuan, 67.
Piece goods, United States, 493.
Plumbago, 90.
Shanghai, motor vehicles, 417.
Shanghai, passenger transit, 98.
Silk and tea, 491.
Silkworms, 592.
Talienwan, trade regulations, 412.
Tientsin, improvements, 516.
T'ung oil, 492.
United States fruits, 313.
United States trade, 71.
West River trade, 295.
China, Indo, trade conditions, 308.
Choate, J. H. (ambassador, London):
Bridge, United States, Sudan, 644.
British colonies, prosperity, 110.
Christiania, business conditions, 661.
Cinchona bark, Java, 310.
Clayton, P. (ambassador, Mexico), law, new railroad, Mexico, 52.
Coal mines, Belgium, ankylostomiasis, 658.
Coal trade, Montevideo, 183.
Coal, United States, southern Germany, 381.
Cocoanuts, Honduras, 507.
Coffee:
Jamaica, 62.
Market, South America, plan for controlling, 63.
Mocha, import, United States, 625.
World's trade, 623.
Coins, silver, import, Salvador, 335.
Coke, United States, demand, Switzerland, 657.
College, colonial, Germany, 513.
Collisions, railway, invention for preventing, France, 529.
Collodion, Netherlands, duty, 510.
Colombia:
Emeralds, 480.
Loan, foreign, 493.
Match monopoly, 174.
Platinum, iridium, and osmium, 147.
Colonial office, France, 172.
Colonies, British, prosperity, 110.
Commercial development, South Africa, 317.
Commercial travelers:
Brazil, 666.
Licenses, Russia, 168.
Taxes on, Russia, 409.
Companies, foreign, Japan, 288.
Concession, mining and railway, Venezuela, 269.
Conger, E. H. (minister, Pekin):
Chinese mining regulations, 590.
Customs regulations, provisional, Kyao-chau, 273.
Mining, Szechuan, 67.
Congresses:
Charity, Paris, 242.
Medical, Brussels, 498.
Medicine, Paris, 497.
Railway, Paris, 651.
Constantinople, exhibition, 184.
Consular education, Germany, 118.
Consular fees, Venezuela, 474.
Consular officers, Japan, 293.
Consular reports transmitted to other Departments, 184, 343, 511, 662.
Constitution, Australian Commonwealth, 595.
Convention, trade-mark, German-Guatemalan, 507.
Contract, railway, Peru, 341.
Copper, United States, competition, 214.
Copyright law, Japanese, operation, 343.
Corn:
Tariff, Venezuela, 661.
United States, Russia, 662.
Corporations, foreign:
Law on, Venezuela, 465.
Russia, legal status, 150.
Venezuela, 271.
Cotton:
Paraguay, 570.
Russia, 229.
Cotton goods:
Bleached, Paraguay, 569.
Exports, Manchester, to United States, 224.
Cotton-spinning machinery, Japan, 93.
Cotton textiles, Paraguay, 460.
Cotton trade, reforms, 116.
Covert, J. C. (consul, Lyons):
France, inherited property, 159.
Indo China, trade conditions, 308.
Philippine situation, French view, 93.
Savings banks, France, 638.

Covert, J. C.—Continued.
Shipments to Chile, 473.
Silk trade, Lyons, 211.
Tuberculosis, precautions against, France, 642.
Cranberry cultivation, Canada, 622.
Crops:
French wheat (1899), 232.
Hop, world's (1899), 626.
Rice, Japan, 661.
Russia, 157.
Southern Russia, failure, 156, 231.
Walnut, Italy, 510.
Wheat, France (1899), 494.
Cunningham, E. S. (consul, Aden), Mocha coffee, import, United States, 625.
Customs classification, Venezuela, 269.
Customs collection, Canada, 334.
Customs regulations and fees, Japan, 277.
Customs regulations, provisional, Kyaochau, 273.
Cyprus, commercial movement, 346.

Davidson, J. W. (consul, Tamsui):
Iron bedsteads, China and Japan, 413.
Railway construction, proposed, Formosa, 98.
Dawson City:
Money-order department, 504.
Notes, 65, 333.
Telegraph, 504.
Debt, national, China, 326.
Debts, collection:
Greece, 456.
Hungary, 455.
Jamaica, 457.
Netherlands, 453.
Paraguay, 459.
Salvador, 458.
Debts, national, 329.
De Leon, P. M. (consul-general, Guayaquil):
Cacao culture, Ecuador, 250.
Ecuador, resources, 36.
Electricity, Ecuador, 175.
Ivory, vegetable, Ecuador, 477.
Machine trade, Ecuador, 35.
Denmark:
Agriculture, protection proposed, 510.
Exchange rate on New York, 182.
Dent, L. A. (consul, Kingston):
Coffee, Jamaica, 62.
Debts, collection, Jamaica, 457.
Tariff, Jamaica, effect on trade, 1.
Diamonds:
Amsterdam, 657.
Mines, Kimberley, 317.
Production, Transvaal, 444.
Dickinson, C. M. (consul-general, Constantinople):
Exhibition, Constantinople, 184.
United States commerce, Turkey, 558.
Diederich, H. W. (consul, Magdeburg):
German beet-sugar campaign (1898–99), 393.
German prize for beet-lifting machine, 392.
Diplomatic officers, Japan, 293.
Dominican Republic, duties payable in gold, 183.
Dredge, new, Russia, 543.
Dried fruit, Germany, 170.
Dudley, I. B. (minister, Lima), railway contract, Peru, 341.
Dudley, L. E. (consul, Vancouver):
Assay offices, British Columbia, 174.
Platinum, iridium, and osmium, Vancouver, 146.
Telegraph, Dawson City, 504.
Dues, port, Marseilles, 235.
Dünkelsbühler, S. (vice consul, Nuremberg), hop crop, world's (1899), 626.
Dutch East Indies, mining law, 180.
Dutch India:
Mining bubble, 433.
Petroleum, 333.
Duties:
Cattle and tobacco, Guatemala, 476.
Collodion, Netherlands, 510.
Increase, Transvaal, 445.
Payable in gold, Dominican Republic, 183.
Tobacco, Venezuela, 335.
Zanzibar, 662.
Duty, druggists' scales:
France, 131.
Germany, 130.
Duty, export, teas, Formosa, 588.

Ecuador:
Cacao culture, 250.
Electricity, 175.

Ecuador—Continued.
Guayaquil Railway, 341.
Ivory, vegetable, 477.
Machine trade, 35.
Resources, 36.
Egg industry:
Germany, 225.
Russia, 225.
Egypt:
Belgian enterprise, 502.
Plague situation, 239.
Port Said, Italian showrooms, 658.
Electric industry, Japan, 96.
Electric plants, Germany, 376.
Electric railways:
Bordeaux, 398.
France, project, 340.
Electric street-car system, Hamburg, 218.
Electric tramways:
Nice, 340.
Northern Spain, 532.
Electricity, Ecuador, 175.
Ellsworth, L. T. (consul, Puerto Cabello), United States capital, Venezuela, 463.
Emigration:
German, 656.
Siberia, 178.
United States to South America, 38.
Emeralds, Colombia, 480.
Engines, demand, Guadeloupe, 566.
England:
Automobiles, cost of running, 641.
Calico-printing trade combination, 659.
Cattle, Russian, 389.
Hosiery and knit underwear, 349.
Manchester exports of cotton goods to United States, 224.
Shipyards, covered berths, 109.
Tiles manufactured from slag, 515.
Erdman, C. W. (consul, Breslau):
Public ways and parks, Silesia, 131.
Silesian wool, 133.
Streets and buildings, construction, Breslau, 390.
Zinc exports, Germany to United States, 210.
Europe:
Fruit, roadside, 395.
Hosiery and knit underwear, 340.
Iron production, 526.
Plan to sell goods in, 635.
Everett, S. B. (consul, Batavia):
Cinchona bark, Java, 310.
Gas-lighting contract, Sumatra, 179.
Mining bubble, Dutch India, 433.
Petroleum, Borneo, 90.
Petroleum, Dutch India, 333.
Exchange, Guadeloupe, 182.
Exchange rate on New York, Denmark, 182.
Exhibitions:
Art, Antwerp, 184.
Constantinople, 184.
Portuguese, proposed, 341.
Export duty on teas, Formosa, 588.
Export, grain, prohibited, China, 180.
Export premiums on flour, Germany, 171.
Exporters to France, suggestion, 499.
Exporters to Germany, suggestions, 125.
Exports:
Cotton goods, Manchester to United States, 224.
German, efforts to increase, 206.
German soap and perfumery, 129.
Japanese tea (1898–99), 179.
Malt, Hamburg, 629.
Mocha coffee to United States, 625.
United States agricultural, German view, 202.
United States to Germany, 203.
Zinc, Germany to United States, 210.
Expositions:
Ghent, 222.
International motor-carriage, Berlin, 517.

Factories:
Brick, Mexico, 51.
Broom, Transvaal, 325.
Famine, water, Maracaibo, 507.
Federal movement, Australia, 104.
Fee, W. T. (consul, Bombay), tramways, Bombay, 561.
Fees and customs regulations, Japan, 277.
Fees, consular, Venezuela, 474.
Fertilizers, commercial, South Australia, 615.
Fiber, nettle, Germany, 655.
Finch, W. R. (minister, Montevideo):
Coal trade, Montevideo, 183.
Port, proposed, Montevideo, 261.
Port works, Montevideo, 41, 470.

Finch, W. R.—Continued.
Port works, Montevideo, plans, 176.
Rice planting, Uruguay, 183.
Fisheries:
Pearl, Venezuela, 272.
Salmon, Norway, 330.
Fisk, G. M. (second secretary of embassy, Berlin), German-American balance of trade, 126.
Flax:
Crop, Russia (1898), 230.
Disease, Belgium, treatise, 502.
Russia, 227.
Trade, Russia, regulations, 169.
Fleming, R. (consul, Edinburgh), machinery, United States, United Kingdom, 385.
Flour:
Germany, export premiums, 171.
Guatemala, 342.
Madagascar, 491.
Spanish tariff, 181.
Flour, wood, manufacture and use:
Germany, 216.
Scotland, 217.
Forestry inspection, Canada, 505.
Formosa:
Camphor monopoly, 415.
Foreigners, treatment, 421.
Railway construction, proposed, 98.
Teas, export duty, 588.
Foundry, Monterey, 265.
Fowler, J. (consul, Chefoo):
Chefoo trade (1898), 296.
Piece goods, United States, China, 493.
United States trade, China, 71.
France:
Advertising, Government, 640.
Apples, United States, dried, new use, 398.
Bordeaux, railway, electric, 398.
Bridge across the Rance, proposed, 526.
Colonial office, 172.
Duty on druggists' scales, 131.
Electric-railway project, 340.
Exporters, suggestion to, 499.
Grain situation, 633.
Hosiery and knit underwear, 366.
Inherited property, 159.
Kid gloves and kid skins, 367.
France—Continued.
Lyons, silk trade, 211.
Market for United States iron, 213.
Marseilles, measures against plague, 238.
Marseilles, port dues, 235.
Marseilles, transportation, 233.
Meat importation, 199.
Nantes street-car strike, 398.
Nice, tramways, electric, 340.
Paris, congress, charity, 242.
Paris, congress, medicine, 497.
Paris, railway congress, 651.
Postal cars wanted, 181.
Piquette, 399.
Railway collisions, invention for preventing, 529.
St. Malo, quay, 661.
Savings banks, 638.
Steamer, new French, 531.
Steamship line, French, report, 243.
Textile plant, new, 330.
Tobacco juice, uses, 236.
Trade with Russia, 403.
Tuberculosis, new remedy, 177.
Tuberculosis, precautions against, 642.
View of Philippine situation, 93.
Wheat crop (1899), 232, 494.
Workmen, accidents, 163.
Franco-American treaty, French view, 512.
Frankfort, railways, street, 340.
Freight charges to Great Britain, excessive, 537.
French warehouse, Madrid, 665.
Fruit, dried, Germany, 170.
Fruit, roadside, Europe, 395.
Fruit trees, South Africa, 490.
Fruit waste, Germany, 200.
Fruits, Honduras, 336.
Fruits, United States:
China and Philippine Islands, 313.
Germany, 200.
Netherlands, 140.
Norway, 139.
Fuel, new, Belgium, 172.
Furniss, H. W. (consul, Bahia):
Manganese mining, Bahia, 266.
Platinum, iridium and osmium, Brazil, 147.
Quarantine, Brazil, 660.

Furniture:
Germany, 170.
Russia, 188.

Gas-lighting contract, Sumatra, 179.
German-American balance of trade, 126.
German schools, foreign countries, 337.
German trade, Uruguay, 336.
German vs. United States pound weight, 169.
German vs. United States trade, Argentine Republic, 507.
Germany:
Apples, United States, 631.
Barber chairs, United States, 141.
Beet-lifting machine, prize for, 392.
Beet-sugar campaign (1898–99), 393.
Berlin, motor-carriage exposition, international, 517.
Breslau, streets and buildings, construction, 390.
British trade, 383.
Canal, new, 523.
Cattle and fresh beef, United States, 196.
Celluloid, substitute, 654.
Chambers of commerce, 207.
Chemical discoveries, 664.
Chemicals, 379.
Coal, United States, southern, 381.
College, colonial, 513.
Consular education, 118.
Duty on druggists' scales, 130.
Egg industry, 225.
Electric plants, 370.
Emigration, 656.
Exports, efforts to increase, 206.
Exports, soap and perfumery, 129.
Exports, United States agricultural, German view, 202.
Fiber, nettle, 655.
Flour, export premiums, 171.
Foreign interests, 127.
Frankfort, street railways, 340.
Fruit, dried, 170.
Fruit, United States, 200.
Fruit waste, 200.
Furniture, 170.
Hamburg electric street-car system, 218.
Hamburg, malt export, 629.
Hamburg, petroleum (1898), 382.
Hosiery and knit underwear, 357.
Germany—Continued.
Imports from United States, 203.
In 1898, 205.
Industries, growth, 377.
Interests, Transvaal, 490.
Iron, United States, 524.
Life-insurance companies, 244.
Locomotives, 134.
Meat imports, 499.
Paper and textiles, 379.
Paper, printing, 498.
Parcels-post exchanges with United States, 637.
Paving stones, artificial, 337.
Pawnbroking, 371.
Sheep and wool, 632.
Strikes, 657.
Suggestions for exporters, 125.
Tariff on agricultural machines and tools, 124.
Tool-machine trust, 121.
Trade and industries, Mannheim, 122.
Trade and industry, 656.
Trade and labor, 379.
Trade-mark convention with Guatemala, 507.
Trade with Russia, 403.
Trusts, 498, 636.
United States horses, 338.
Wages, children, 508.
Wood flour, manufacture and use, 216.
Wool import, 128.
Wool, Silesian, 133.
Zinc exports to United States, 210.
Ghent, exposition, 222.
Gibbs, M. W. (consul, Tamatave):
Flour, Madagascar, 491.
Municipal taxes, Madagascar, 183.
Gifford, G. (consul, Basel), coke, United States, demand, Switzerland, 657.
Gloves, kid, France, 367.
Gold-bearing land, Siberia, lease, 553.
Gold Coast, commerce, 347.
Gold-mining machinery, Transvaal, 188.
Gold:
Output, 1899, Transvaal, 489.
Philippine Islands, 186.
Production, Transvaal (August, 1899), 648.
Goldschmidt, L. (consul, La Guayra), corn, tariff, Venezuela, 661.

Goodnow, J. (consul-general, Shanghai):
China, freight facilities from United States Atlantic ports, 416.
Formosa teas, export duty, 588.
Motor vehicles, Shanghai, 417.
Passenger transit, Shanghai, 98.
Plumbago, China, 90.
Silk and tea, China, 491.
T'ung oil, China, 492.
Gowdy, J. K. (consul-general, Paris):
Duty on druggists' scales, France, 130.
Meat importation, France, 199.
Gowey, J. F. (consul-general, Yokohama):
American-Asiatic Association, Japan, 332.
Camphor monopoly, Formosa, 415.
Electric industry, Japan, 96.
Japan, foreigners, 165.
Passenger transit, Japan, 97.
Plumbago, Japan, 89.
Rice crop, Japan, 661.
Tea exports, Japanese (1898–99), 179.
Tobacco monopoly, Japan, 431.
Grain export prohibited, China, 180.
Grain situation, France, 633.
Great Britain:
Aluminium, 215.
Canadian competition, 189.
Colonies, prosperity, 110.
Freight charges to, excessive, 537.
German trade, 383.
Harvest, 494.
Shipping trust, 538.
Shipyards, covered berths, 109.
Trade competition with United States, 536.
Trade notes, Midlands, 540.
Westinghouse works, 384.
Greece:
Athens, merchants, 144.
Debts, collection, 456.
Quarantine regulations, 509.
Griffith, P. M. (consul, Matamoros), railway concession, Mexico, 174.
Grinnell, W. F. (consul, Manchester), imports, cotton goods, Manchester to United States, 224.
Guadeloupe:
Boilers, engines, etc., demand, 566.
Exchange, 182.
Hurricane, 478.
Guatemala:
Bonds, 335.
Duties, cattle and tobacco, 476.
Flour, 342.
Trade-mark convention with Germany, 507.
Guayaquil Railway, 341.
Guenther, R. (consul-general, Frankfort):
British-German trade, 383.
Strikes, Germany, 657.
Trusts, Germany, 636.

Hagerman, H. J. (second secretary of embassy, St. Petersburg), railway, Siberia, work on, 409.
Halstead, M. (consul, Birmingham):
Automobiles, cost of running, England, 641.
British harvest, 494.
British shipping trust, 538.
Copper, United States, competition, 214.
Freight charges to Great Britain, excessive, 537.
Licenses, commercial travelers, Russia, 168.
Trade notes, Midlands, 540.
United States trade competition with Great Britain, 536.
Westinghouse works, Great Britain, 384.
Hamburg:
Electric street-car system, 218.
Malt export, 629.
Petroleum (1898), 382.
Hamilton, J. E. (commercial agent, Morrisburgh), canals, Canada, cost, 173.
Hanauer, S. W. (vice-consul-general, Frankfort):
Chambers of commerce, Germany, 207.
Coal, United States, southern Germany, 381.
Dried fruit, Germany, 170.
Exports, German, efforts to increase, 206.
Exports, United States, agricultural, German view, 202.
Exporters to Germany, suggestions, 125.
Furniture, Germany, 170.
Iron, United States, Germany, 524.

Hanauer, S. W.—Continued.
Meat imports, Germany, 499.
Russia, trade openings, 149.
Street railways, Frankfort, 340.
Tool-machine trust, Germany, 121.
Trade and labor, Germany, 379.
Wages, children, Germany, 508.
Harbor improvements, Victoria, 107.
Harbor regulations, Puerto Cabello, 42.
Harris, E. L. (consular agent, Eibenstock):
Barber chairs, United States, Germany, 141.
Emigration, German, 656.
Life-insurance companies, Germany, 244.
Harrison, W. (vice-consul, Asuncion), sugar, Paraguay, 47.
Hart, C. B. (minister, Bogotá):
Emeralds, Colombia, 480.
Loan, foreign, Colombia, 493.
Harvest, Great Britain, 494.
Hawaii:
Imports, recent, 653.
Plows, United States, 441.
Hayden, J. E. (consul, Castellamare di Stabia), United States goods, faulty packing, 500.
Haywood, W. (consul-general, Honolulu), plows, United States, Hawaii, 441.
Heenan, T. E. (consul, Odessa):
Cattle, Russian, England, 389.
Crops, Russia, 157.
Crops, southern Russia, failure, 156, 231.
Foreign corporations, Russia, legal status, 150.
Plague, precautions against, Russia, 495.
Hemp crop, Russia (1898), 230.
Hemp, Russia, 228.
Henequen cultivation, Venezuela, 476.
Henry, W. W. (consul, Quebec), platinum, iridium, and osmium, Quebec, 145.
Heydecker, W. A. (vice and deputy consul-general, St. Petersburg), Russia, acreage in beets (1899), 408.
Hill, F. D. (consul, Amsterdam):
Diamonds, Amsterdam, 657.
Gold production, Transvaal (August, 1899), 648.
Hill, F. D. (consul, Santos):
Foreign judgments, Brazil, 54.
India-rubber trade, 114.
United States-Brazilian trade, 26.
United States trade, South America, how to extend, 37.
Hog meat, Singapore, 339.
Hollis, W. S. (consul, Lourenço Marquez), boots and shoes, Lourenço Marquez, 316.
Holloway, W. R. (consul-general, St. Petersburg):
Air brakes, Westinghouse, Russian railways, 404.
Flax and hemp crops, Russia (1898), 230.
Flax trade, Russia, regulations, 169.
Hop industry, Russia (1898), 628.
New city and port in northern Russia, 331.
Petroleum industry, Russia, 226.
Siberia, penal colony no longer, 178.
Honduras:
Cocoanuts, 507.
Fruits, 336.
Honduras, British railroad, proposed, 468.
Hongkong:
Trade (1898), 166.
United States trade interests, 418.
Hop crop, world's (1899), 626.
Hop industry, Russia (1898), 628.
Hopley, J. E. (consul, Southampton), roadway, steel-plate, Ireland, 495.
Horses, United States, Germany, 338.
Hosiery:
England, 349.
France, 366.
Germany, 357.
Hungary:
Commercial policy, 210.
Debts, collection, 455.
Hunter, W. G. (minister, Guatemala) bonds, Guatemala, 335.
Hurricane, Guadeloupe, 478.
Huts, portable, South Africa, 446.

Implements, United States agricultural, New South Wales, 438.
Importers, Sicilian essential oils, advice, 225.

Imports:
Argentine Republic from United States, 21.
Cotton goods, United States from Manchester, 224.
Germany from United States, 203.
Germany's wool, 128.
Hawaii, recent, 653.
Meat, France, 199.
Meat, Germany, 499.
Mocha coffee, United States, 625.
Paraguay, 44.
Silver coins, Salvador, 335.
Zinc, United States from Germany, 210.
Incubators, demand, Belgium, 342.
India:
Bombay, tramways, 561.
Calcutta, trade, 436.
Railway bridges, 435.
Railway machinery, United States, 654.
Railways, 560.
India, Dutch:
Mining bubble, 433.
Petroleum, 333.
India-rubber trade, 114.
Indo China, trade conditions, 308.
Insurance companies, life, Germany, 244.
Insurance, life, Cape Colony, 448.
Ireland:
Banking and railway statistics, 143.
Roadway, steel-plate, 495.
Iridium:
Brazil, 147.
Canada, 145.
Colombia, 147.
Iron bedsteads:
Canada, 659.
China and Japan, 413.
Turkey, 666.
Iron production, Europe and United States, 526.
Iron theaters, demand, Spain, 662.
Iron, United States:
Germany, 524.
Market, France, 213.
Iron wanted, Belgium, 342.
Irrigation, Sudan, 187.
Italian showrooms, Port Said, 658.
Italy:
Commerce, 525.
Sicilian essential oils, advice to United States importers, 225.
Tramways, Milan, 135.
Walnut crop, 510.
Ivory market, Antwerp, 452.
Ivory, vegetable, Ecuador, 477.

Jackson, J. B. (secretary of embassy, Berlin), flour, Germany, export premiums, 171.
Jamaica:
Coffee, 62.
Debts, collection, 457.
Misrepresentations regarding, 479.
Newspaper reports regarding, 503.
Tariff: Effect upon trade, 1.
Japan:
American-Asiatic Association, 332.
Copyright law, operation, 343.
Cotton-spinning machinery, 93.
Customs regulations and fees, 277.
Diplomatic and consular officers, 293.
Electric industry, 96.
Foreign companies, 288.
Foreigners, 165.
Foreigners, regulations, 423.
Formosa, proposed railway construction, 98.
Iron bedsteads, 413.
Passenger transit, 97.
Plumbago, 89.
Ports, new, 332.
Ports, new, regulations, 593.
Pulp, wood, market, 594.
Regulations relating to foreigners, 289.
Rice crop, 661.
Tea exports (1898–99), 179.
Tobacco monopoly, 431.
Tonnage dues law, 292.
Treaties, new, 179.
Treaties, operation, 285.
Jarvis, W. (consul, Milan), tramways, Milan, 135.
Java, cinchona bark and quinine, 310.
Jenkins, J. (consul, San Salvador):
Debts, collection, Salvador, 458.
Silver coins, import into Salvador, 335.
Tariff changes, Salvador, 59.

Jews, emigration to Palestine, 496.
Johnson, A. B. (consul, Amoy), fruits, United States, China, and Philippine Islands, 313.
Johnston, B. (consul, Utilla):
Cocoanuts, Honduras, 507.
Fruits, Honduras, 336.
Jones, F. S. (chargé d'affaires, Buenos Ayres), the tasajo, or dried-beef, industry in the River Plata countries, 575.
Judgments, foreign, Brazil, 54.
Judicial reforms, Argentine Republic, 57.

Kenneday, K. K. (consul, Para):
Amazon Valley, resources and trade opportunities, 29.
Para, steamship service with United States, improved, 660.
Railroad ties forgotten, Brazil, 176.
Kid gloves, France, 367.
Kid skins, France, 368.
Kimberley diamond mines, 317.
King, H. (minister, Bangkok), treaty, commercial, Russian-Siamese, 509.
Knit underwear:
England, 349.
France, 366.
Germany, 357.
Kyao-chau:
Customs regulations, provisional, 273.
Tariff regulations, 589.

Labor, Germany, 379.
Lang, P. (consul, Sherbrooke), platinum, iridium, and osmium, Quebec, 146.
Laws:
Japanese copyright, operation, 343.
Mining, Dutch East Indies, 180.
New railway, Mexico, 52.
On foreign corporations, Venezuela, 465.
Tonnage dues, Japan, 292.
Lawn mowers, automatic, demand, Belgium, 342.
Lay, J. G. (consul-general, Barcelonia), tramways, electric, northern Spain, 532.
Leather industry:
Cape Colony, 650.
Russia, 168.
Le Bert, R. (consul, Ghent):
Automatic lawn mowers and incubators, Belgium, 342.
Exposition, Ghent, 222.
Fuel, new, Belgium, 172.
Iron and steel wanted, Belgium, 342.
Refrigerators, demand, Belgium, 511.
Ledoux, U. J. (consul, Three Rivers), catalogues free of duty, Canada, 659.
Letters rogatory, tax, Brazil, 336.
Licenses, commercial travelers, Russia, 168.
Liefeld, E. T. (consul, Freiburg), celluloid, substitute, Germany, 654.
Life insurance, Cape Colony, 448.
Life-insurance companies, Germany, 244.
Likin tax on rice, China, 180.
Lincoln, G. F. (consul-general, Antwerp):
Antwerp-San Francisco, steamship service, 508.
Art exhibition, Antwerp, 184.
Belgium, trade (first five months, 1899), 136.
Dredge, new Russian, 543.
Ivory market, Antwerp, 452.
Steamship line, new, Antwerp to Portland, Me., 508.
Listoe, S. (consul, Rotterdam):
Debts, collection, Netherlands, 453.
Fruit, United States, Netherlands, 140.
Live animals, transportation, Belgium, 501.
Loan, foreign, Colombia, 493.
Locomotives, Germany, 134.
Loomis, F. B. (minister, Caracas):
Coffee market, South America, plan for controlling, 63.
Corporations, foreign, Venezuela, 271.
Inland-navigation project, South America, 175.
Pearl fisheries, Venezuela, 272.
Sugar industry, Trinidad, 61.
Lourenço Marquez, boots and shoes, 316.
Lyon, S. S. (consul, Hiogo), cotton-spinning machinery, Japan, 93.
Lyons silk trade, 211.

Macaroni manufacture, France, United States wheat, 400.
McCook, J. C. (consul, Dawson City):
Agricultural possibilities, Yukon territory, 620.
Dawson City, notes, 65, 333.
Mining and agriculture, Yukon territory, 481.
Mining, Yukon region, 503.
Money-order department, Dawson City, 504.
McCullough, C. A. (consul, St. Stephen):
Customs collection, Canada, 334.
Petroleum and naphtha, 504.
McFarland, S. C. (consul, Nottingham), hosiery and knit underwear, England, 349.
Magill, S. E. (consul, Tampico), waterworks, Tampico, 342.
McGinley, D. E. (consul, Athens):
Debts, collection, Greece, 456.
Quarantine regulations, Greece, 509.
Merchants, Athens, 144.
Machine, beet-lifting, prize for, Germany, 392.
Machine trade, Ecuador, 35.
Machinery:
Cotton-spinning, Japan, 93.
Gold-mining, Transvaal, 188.
United States railway, India, 654.
United States, United Kingdom, 385.
Machines and tools, agricultural, German tariff, 124.
McNally, J. C. (secretary of legation, Bogotá):
Match monopoly, Colombia, 174.
Platinum, iridium, and osmium, Colombia, 147.
Macrum, C. E. (consul, Pretoria):
Broom factory, Transvaal, 325.
Diamond production, Transvaal, 444.
Gold output (1899), Transvaal, 489.
Importers, South African Republic, 100.
Railway construction, 100.
Railways, Transvaal, 341.
Madagascar:
Flour, 491.
Taxes, municipal, 183.
Madrid, warehouse, French, 665.
Mail service, new, Azores, 181.
Malt export, Hamburg, 629.
Manchester exports of cotton goods to United States, 224.
Manganese mining, Bahia, 266.
Mannheim, trade and industries, 122.
Maracaibo, water famine, 507.
Markets:
Coffee, South America, plan for controlling, 63.
Ivory, Antwerp, 452.
Siberia, 344.
United States iron, France, 213.
Wood pulp, Japan, 594.
Marseilles:
Plague, measures against, 238.
Port dues, 235.
Transportation, 233.
Martin, C. W. (consul, Amherstburg), bedsteads, iron, Canada, 659.
Martin, W. (consul, Chinkiang):
Grain export prohibited, China, 180.
Likin tax on rice, China, 180.
Mason, F. H. (consul-general, Berlin):
Cattle and fresh beef, United States, Belgium and Germany, 196.
Consular education, Germany, 118.
Duty on druggists' scales, Germany, 130.
German tariff on agricultural machines and tools, 124.
Motor-carriage exposition, international, Berlin, 517.
Parcels-post exchanges, United States and Germany, 637.
Tariff regulations, Kyao-chau, 589.
Wood flour, manufacture and use, Germany, 216.
Match monopoly, Colombia, 174.
Matches, Mexico, 565.
Mauritius:
Bubonic plague, 651.
Taxation, 651.
United States trade, 183.
Maxwell, C. L. (consul-general, Santo Domingo), duties payable in gold, Dominican Republic, 183.
Mayer, D. (consul, Buenos Ayres), judicial reforms, Argentine Republic, 57.
Meat:
Hog, Singapore, 339.
Importation, France, 199.
Imports, Germany, 499.
Medical congress, Brussels, 498.
Medicine, congress, Paris, 497.

Medicines, patent, Portugal, 142.
Merchants, Athens, 144.
Merriam, J. W. (consul, Iquique), soda nitrate, Chile, 493.
Mertens, T. (consular agent, Grao)·
Tobacco, Spain, 509.
Wheat and sugar, Spain, 171.
Metcalf, H. W. (consul, Newcastle-on-Tyne), shipyards, covered berths, England, 109.
Mexico:
Agriculture, 49.
Brick factory, 51.
Matches, 565.
Monterey, foundry, 265.
New railroad law, 52.
Railway concession, 174.
Railways, street, Veracruz, 562.
Tampico, waterworks, 342.
Tampico, waterworks and sewerage, 563.
Mica, Ontario, 485.
Milan, tramways, 135.
Mills, paper, failures, Norway, 342.
Mines:
Coal, Belgium, ankylostomiasis, 658.
Diamond, Kimberley, 317.
Mining:
Alaska, 483.
Bubble, Dutch India, 433.
Canada, project, 483.
Enterprise, Ontario, 486.
Law, Dutch East Indies, 180.
Machinery, gold, Transvaal, 188.
Manganese, Bahia, 266.
Regulations, China, 590.
Szechuan, 67.
Yukon territory, 481, 503.
Mining and railway concession, Venezuela, 269.
Mocha coffee, import, United States, 625.
Monaghan, J. C. (consul, Chemnitz):
Electric plates, Germany, 376.
German and French trade with Russia, 403.
German industries, growth, 377.
German interests, Transvaal, 490.
German schools, foreign countries, 337.
German trade, Uruguay, 336.
Germany (1898), 205.
Monaghan, J. C.—Continued.
Germany's foreign interests, 127.
Hosiery and knit underwear, Germany, 357.
Iron production, Europe and United States, 526.
Italy, commerce, 525.
Locomotives, Germany, 134.
Paving stones, artificial, Germany, 337.
Persia, trade conditions, 240.
Postal shipments, Russia, 496.
Printing paper, Germany, 498.
Russia, Asiatic, resources, 411.
Russia, trade opportunities, 403.
United States trade, Russia, extension, 555.
Monaghan, J. F. (vice and acting consul, Chemnitz), Italian showrooms, Port Said, 658.
Money-order department, Dawson City, 504.
Monopolies:
Camphor, Formosa, 415.
Match, Colombia, 174.
Tobacco, Japan, 431.
Monterey, foundry, 265.
Montevideo:
Coal trade, 183.
Port, proposed, 261.
Port works, 41, 470.
Port works, plans, 176.
Moseley, R. A., jr. (consul-general, Singapore):
Hog meat, Singapore, 339.
Tin, Straits Settlements, 511.
Tin, Straits Settlements: Capital, opening, 584.
Motor-carriage exposition, international, Berlin, 517.
Motor vehicles, Shanghai, 417.
Municipal taxes, Madagascar, 183.
Murphy, C. A. (consular agent, Adelaide), fertilizers, commercial, South Australia, 615.

Nantes street-car strike, 396.
Naphtha, Canada, 504.
Naphtha industry, Russia, history, 147.
Natal, 322.
Neill, R. R. (secretary of legation, Lima), steamship line, Spain to Peru, proposed, 508.

Nelson, V. E. (consul, Bergen):
Anchovies, Scandinavia, 249.
Business firms, Bergen, 245.
Railway management, Norway, 182.
Salmon fisheries, Norway, 390.
Netherlands:
Amsterdam, diamonds, 657.
Collodion, duty, 510.
Debts, collection, 453.
Fruit, United States, 140.
Nettle fiber, Germany, 655.
New Caledonia:
Development, 653.
Progress, 313.
Shipping lines from United States, 587.
Steamship line, proposed, 339.
Newel, S. (minister, The Hague):
Collodion, Netherlands, duty, 510.
Mining law, Dutch East Indies, 180.
Tolls, Belgium, 510.
New Guinea, British, trade, 346.
New South Wales, implements, United States, agricultural, 438.
New York, exchange rate on, Denmark, 182.
Nicaragua, trade (1898), 347.
Nice, tramways, electric, 340.
Nitrate, soda, Chile, 493.
Norway:
Anchovies, 249.
Bergen, business firms, 245.
Fruit, United States, 139.
Paper mills, failures, 342.
Railway management, 182.
Salmon fisheries, 330.

Oils:
Olive, Syria, 450.
Russian, Azores, 181.
Sicilian essential, advice to importers, 225.
T'ung, China, 492.
Ontario:
Agricultural conditions, 506.
Mica, 485.
Peat, 487.
Railway, new, and mining enterprise, 486.
Orange Free State, 320.
Osmium:
Brazil, 147.
Canada, 145.
Colombia, 147.
Osterhaus, P. J. (vice and deputy consul, Mannheim), trade and industries, Mannheim, 122.

Packing United States goods, faulty, 500.
Pagés, J. G. (vice-consul, Veracruz):
Matches, Mexico, 565.
Railways, street, Veracruz, 562.
Palestine, Jewish immigration, 496.
Paper:
Germany, 381.
Printing, Germany, 498.
Paper mills, failures, Norway, 342.
Para, steamship service with United States, improved, 660.
Paraguay:
Capital, openings, 567.
Caraguata, 571.
Cotton, 570.
Cotton goods, bleached, 569.
Cotton textiles, 460.
Debts, collection, 459.
Imports, 44.
Sansaverde, 570.
Sugar, 47.
Textile plants, 570.
Parcels-post exchanges, United States and Germany, 637.
Paris:
Congress, charity, 242.
Congress, medicine, 497.
Railway congress, 651.
Parks, public, Silesia, 131.
Patterson, R. F. (consul-general, Calcutta):
Calcutta, trade, 436.
Railway bridges, India, 435.
Railway machinery, United States, India, 654.
Railways, India, 560.
Patent medicines, Portugal, 142.
Paving stones, artificial, Germany, 337.
Pawnbroking, Germany, 371.
Pearl fisheries, Venezuela, 272.
Peat, Ontario, 487.
Peirce, H. H. D. (chargé d'affaires, St. Petersburg):
Corn, United States, Russia, 662.
Gold-bearing land, Siberia, lease, 553.
Penal colony, Siberia no longer, 178.
Perfumery, German exports, 129.

Persia:
Art, sale of specimens, 177.
Plague, 338.
Trade conditions, 240.
Peru:
Railway contract, 341.
Steamship line to Spain, proposed, 508.
Petroleum:
Borneo, 90.
Canada, 504.
Dutch India, 333.
Hamburg (1898), 382.
Russia, industry, 226.
Pettit, G. P. (consul, Düsseldorf):
Fruit, United States, Germany, 200.
Fruit waste, Germany, 200.
Philippine Islands:
Gold, 186.
United States fruits, 313.
Philippine situation, French view, 93.
Piatt, A. D. (acting consul, Dublin), banking and railway statistics, Ireland (1898), 143.
Piatti, A. (vice-consul, Nice), electric tramways, Nice, 340.
Piece goods, United States, China, 493.
Pickerell, G. H. (consul, St. Michael's):
Mail service, new, Azores, 181.
Russian oil, Azores, 181.
Piquette, France, 398.
Pitcairn, H. (consul, Hamburg):
Coffee trade, world's, 623.
Electric street-car system, Hamburg, 218.
Malt export, Hamburg, 629.
Petroleum, Hamburg (1898), 382.
Sheep and wool, Germany, 632.
Plague:
Bubonic, Mauritius, 651.
Marseilles, measures against, 238.
Persia, 338.
Precautions against, Russia, 495.
Situation, Egypt, 239.
Plants, textile:
France, new, 330.
Russia, 227.
Platinum:
Brazil, 147.
Canada, 145.
Colombia, 147.
Plows, United States, Hawaii, 441.
Plumbago:
China, 90.
Japan, 89.
Plumacher, E. H. (consul, Maracaibo):
Bank, United States, Caracas, proposed, 176.
Consular fees, Venezuela, 474.
Customs classification, Venezuela, 269.
Henequen cultivation, Venezuela, 476.
Law on foreign corporations, Venezuela, 465.
Mining and railway concession, Venezuela, 269.
Water famine, Maracaibo, 507.
Pollard, J. K. (consul-general, Monterey):
Agriculture, Mexico, 49.
Brick factory, Mexico, 51.
Foundry, Monterey, 265.
Port and city, new, northern Russia, 331.
Port dues, Marseilles, 235.
Port, proposed, Montevideo, 261.
Port Said, Italian showrooms, 658.
Port works, Montevideo, 41, 470.
Plans, 176.
Ports, new, Japan, 332.
Regulations, 593.
Portugal, patent medicines, 142.
Portuguese exhibition, proposed, 341.
Postal cars wanted, France, 181.
Postal shipments, Russia, 496.
Pressly, N. E. (vice-consul, Tampico), waterworks and sewerage, Tampico, 563.
Printing paper, Germany, 498.
Property, inherited, France, 159.
Puerto Cabello, harbor regulations, 42.
Pulp, wood, market, Japan, 594.
Pumps, Cape Colony, 446.

Quarantine:
Brazil, 660.
Regulations, Greece, 509.
Quay, St. Malo, 661.
Quinine, Java, 310.

Ragsdale, J. W. (consul, Tientsin), debt, national, China, 326.
Rails, bids, Brazil, 58.
Railway bridges, India, 435.

Railway collisions, invention for preventing, France, 529.
Railway concessions:
Mexico, 174.
Venezuela, 269.
Railway congress, Paris, 651.
Railway construction:
Formosa, proposed, 98.
Transvaal, 100.
Railway contract, Peru, 341.
Railway law, new, Mexico, 52.
Railway machinery, United States, India, 654.
Railway ties forgotten, Brazil, 176.
Railways:
Canada, enterprise, 505.
Guayaquil, 341.
India, 560.
Norway, management, 182.
Ontario, new, 486.
Russia, Westinghouse air brakes, 404.
State, Siberia, work on, 409.
Statistics, Ireland (1898), 143.
Transvaal, 341.
Yukon territory, 482.
Railways, electric:
Barcelona, 532.
Bilbao, 534.
Bordeaux, 398.
Project, France, 340.
San Sebastian, 533.
Valencia, 534.
Railways, street:
Bombay, 561.
Frankfort, 340.
Veracruz, 562.
Rance, France, bridge across, proposed, 526.
Ravndal, G. B. (consul, Beirut):
Olive oil, Syria, 450.
United States goods, samples wanted, Syria, 448.
Refrigerators, demand, Belgium, 511.
Rice:
China, likin tax, 180.
Crop, Japan, 661.
Planting, Uruguay, 183.
Roads, public, Silesia, 131.
Roadways:
Steel, Spain, 534.
Steel-plate, Ireland, 495.
Rogatory, letters, tax, Brazil, 336.
Roosevelt, G. W. (consul, Brussels):
Ankylostomiasis in coal mines, Belgium, 658.
Aphthous stomatitis, Belgium, 634.
Automobiles, Belgium, taxes, 511.
Belgian enterprise, Egypt, 502.
Cheese, regulations for manufacture and sale, Belgium, 634.
Live animals, transportation, Belgium, 501.
Tuberculosis, Belgian cattle, 500.
Vehicle regulations, Belgium, 501.
Rubber trade, 114.
Ruffin, J. N. (consul, Asuncion):
Bleached cotton goods, Paraguay, 569.
Cotton textiles, Paraguay, 460.
Debts, collection, Paraguay, 459.
Imports, Paraguay, 44.
Paraguay, capital, openings, 567.
Textile plants, Paraguay, 570.
Russia:
Acreage in beets (1899), 408.
Commercial travelers, licenses, 168.
Corn, United States, 662.
Cotton, 229.
Crops, 157.
Crops, failure, southern, 156, 231.
Dredge, new, 543.
Egg industry, 225.
Flax, 227.
Flax and hemp crops (1898), 230.
Flax trade, regulations, 169.
Foreign corporations, legal status, 150.
German and French trade, 403.
Hemp, 228.
Hop industry (1898), 628.
Leather industry, 168.
Naphtha industry, history, 147.
Petroleum industry, 226.
Plague, precautions against, 495.
Port and city, new, northern, 331.
Postal shipments, 496.
Railways, Westinghouse air brakes, 404.
Silk, 230.
Taxes on trade and commercial travelers, 409.
Textile plants, 227, 510.
Trade openings, 149.
Trade openings, new, 185.
Trade opportunities, 401.

Russia—Continued.
Treaty, commercial, with Siam, 509.
United States trade, extension, 555.
Volga River, navigation, 148.
Woods and furniture, 188.
Russia, Asiatic, resources, 411.
Russian oil, Azores, 181.

St. Malo, quay, 661.
Salmon fisheries, Norway, 330.
Salvador:
Debts, collection, 458.
Silver coins, import, 335.
Tariff changes, 59.
Samples, United States goods, wanted, Syria, 448.
Sampson, A. J. (minister, Quito), Guayaquil Railway, 341.
San José scale, Canada, suppressing, 621.
San Sebastian, tramways, electric, 533.
Sansaverde, Paraguay, 570.
Sarle, A. L. (acting consul, Zanzibar), duties, Zanzibar, 662.
Savings banks, France, 638.
Sawter, G. (consul, Glauchau):
Apples, United States, Germany, 631.
Fiber, nettle, Germany, 655.
Scale, San José, Canada, suppressing, 621.
Scales, druggists', duty:
France, 131.
Germany, 130.
Scandinavia, anchovies, 249.
Schools, German, foreign countries, 337.
Scotland, wood flour, manufacture and use, 217.
Seeger, E. (consul-general, Rio de Janeiro), Brazil, southern, 571.
Sewall, H. M. (special agent, Honolulu), imports, recent, Hawaii, 653.
Sewerage, Tampico, 563.
Seyfert, A. G. (consul, Stratford):
Agricultural conditions, Ontario, 506.
Peat, Ontario, 487.
Shanghai:
Motor vehicles, 417.
Passenger transit, 98.
Sheep and wool, Germany, 632.
Shipping trust, Great Britain, 538.
Shipyards, covered berths, England, 109.
Shoes, Lourenço Marquez, 316.
Shotts, G. W. (commercial agent, Sault Ste. Marie), railway, new, and mining enterprise, Ontario, 486.
Showrooms, Italian, Port Said, 658.
Siam, treaty, commercial, with Russia, 509.
Siberia:
Gold-bearing land, lease, 553.
Immigration, 178.
Markets, 344.
Penal colony no longer, 178.
Railway, State, work on, 409.
Silesia:
Public ways and parks, 131.
Wool, 133.
Silk:
China, 491.
Russia, 230.
Trade, Lyons, 211.
Silkworms, China, 592.
Silver coins, import, Salvador, 335.
Singapore, hog meat, 339.
Skinner, R. P. (consul, Marseilles):
Colonial office, France, 172.
Electric-railway project, France, 340.
Grain situation, France, 633.
Plague, Marseilles, measures against, 238.
Plague situation, Egypt, 239.
Postal cars wanted, France, 181.
Transportation, Marseilles, 233.
Skins, kid, France, 368.
Smith, A. E. (consul, Victoria), harbor improvements, Victoria, 107.
Smith, T. (consul, Moscow):
Emigration to Siberia, 178.
Naphtha industry, Russia, history, 147.
Volga River, navigation, 148.
Soap, German exports, 129.
Soda nitrate, Chile, 493.
South Africa:
Candy, United States, 315.
Cape Colony, 323.
Cape Colony, leather industry, 650.
Cape Colony, life insurance, 448.
Cape Colony, pumps, 446.
Cape Town to Kimberley, 317.
Commercial development, 317.
Fruit trees, 490.

South Africa—Continued.
Huts, portable, 446.
Importers, South African Republic, 100.
Kimberley diamond mines, 317.
Natal, 322.
Orange Free State, 320.
South African Republic, 320.
Tinware, 339.
Trade notes, 445, 489, 646.
Transvaal, broom factory, 325.
Transvaal, diamond production, 444.
Transvaal, duties, increase, 445.
Transvaal, German interests, 490.
Transvaal, gold output (1899), 489.
Transvaal, gold production (August, 1899), 648.
Transvaal, railways, 341.
United States trade opportunities, 442.
South America:
British trade reports, 506.
Coffee market, plan for controlling, 63.
Exhibition, Portuguese, proposed, 341.
Immigrants, United States, 38.
Inland-navigation project, 175.
United States trade, how to extend, 37.
Spain:
Barcelona, tramways, electric, 532.
Bilbao, tramways, electric, 534.
Flour, tariff, 181.
Madrid, warehouse, French, 665.
Roadway, steel, 534.
San Sebastian, tramways, electric, 533.
Steamship line to Peru, proposed, 508.
Theaters, iron, demand, 661.
Tobacco, 509.
Tramways, electric, 532.
Valencia, tramways, electric, 534.
Wheat and sugar, 171.
Spinning machinery, cotton, Japan, 93.
Sprague, H. J. (consul, Gibraltar), tariff, flour, Spain, 181.
Springer, J. H. (vice-consul, Kingston), Jamaica, misrepresentations regarding, 479.
State railway, Siberia, work on, 409.
Steamer, new French, 531.
Steamship lines:
Argentine Republic, proposed, 466.
French, report, 243.
New, Antwerp to Portland, Me., 508.
New Caledonia, proposed, 339.
Spain to Peru, proposed, 508.
Steamship service:
Antwerp-San Francisco, 508.
Para and United States, improved, 660.
Steel-plate roadway, Ireland, 495.
Steel roadway, Spain, 534.
Steel wanted, Belgium, 342.
Stern, L. (commercial agent, Bamberg):
Exports, United States to Germany, 203.
German exports, soap and perfumery, 129.
Wool import, Germany, 128.
Stone, artificial, Belgium, 655.
Stoves, heating and cooking, Uruguay, 40.
Stowe, J. G. (consul-general, Cape Town):
Candy, United States, South Africa, 315.
Commercial development, South Africa, 317.
Duties, increase, Transvaal: South African trade notes, 445.
Fruit trees, South Africa, 490.
Leather industry, Cape Colony, 650.
Life insurance, Cape Colony, 448.
Pumps, Cape Colony, 446.
South Africa, commercial development, 317.
South African trade notes, 489, 646.
South Africa, United States trade opportunities, 444.
Tinware, South Africa, 339.
Straits Settlements:
Capital, opening for, 584.
Singapore, hog meat, 339.
Tin, 511, 584.
Straus, O. S. (minister, Constantinople), Jewish emigration to Palestine, 496.
Street-car strike, Nantes, 396.
Street-car system, electric, Hamburg, 218.
Street railways:
Bombay, 561.
Frankfort, 340.
Veracruz, 562.

Streets and buildings, construction, Breslau, 390.
Strike, street-car, Nantes, 396.
Strikes, Germany, 657.
Sudan:
  Bridge, United States, 644.
  Irrigation, 187.
Sugar:
  Paraguay, 47.
  Spain, 171.
Sugar, beet, campaign (1898–99), Germany, 393.
Sugar industry, Trinidad, 61.
Sumatra, gas-lighting contract, 179.
Swalm, A. W. (consul, Montevideo):
  Emigration to South America, 38.
  Port works, Montevideo, 470.
  Stoves, heating and cooking, Uruguay, 40.
Sweden:
  Anchovies, 249.
  Christiana, business conditions, 661.
Switzerland, coke, United States, demand, 657.
Syria:
  Olive oil, 450.
  Trade openings, 663.
  United States goods, samples wanted, 448.
Szechuan, mining, 67.

Talienwan, trade regulations, 412.
Tampico:
  Waterworks, 342.
  Waterworks and sewerage, 563.
Tariff:
  Agricultural machines and tools, Germany, 124.
  Argentine Republic, proposed, 58.
  Changes, Salvador, 59.
  Corn, Venezuela, 661.
  Flour, Spain, 181.
  Jamaica, effect upon trade, 1.
  Regulations, Kyao-chau, 589.
Tasajo, or dried-beef, industry, Argentine Republic and Uruguay, 575.
Taxes:
  Automobiles, Belgium, 511.
  Letters rogatory, Brazil, 336.
  Likin, on rice, China, 180.
  Municipal, Madagascar, 183.
  Taxation, Mauritius, 651.
Taxes—Continued.
  Trade and commercial travelers, Russia, 409.
Taylor, S. M. (consul, Glasgow), wood flour, manufacture and use, Scotland, 217.
Tea:
  China, 491.
  Exports, Japanese (1898–99), 179.
  Formosa, export duty, 588.
Telegraph:
  Dawson City, 504.
  Yukon territory, 482.
Textile plants:
  New, France, 330.
  Paraguay, 570.
  Russia, 227, 510.
Textiles:
  Cotton, Paraguay, 460.
  Germany, 381.
Thackara, A. M. (consul, Havre):
  Bridge across the Rance, France, proposed, 526.
  Quay, St. Malo, 661.
  Steamship line, French, report, 243.
Theaters, iron, demand, Spain, 662.
Tientsin, improvements, 516.
Ties, railroad, forgotten, Brazil, 176.
Tiles manufactured from slag, 515.
Tin, Straits Settlements, 511, 584.
Tinware, South Africa, 339.
Tobacco:
  Duties, Guatemala, 476.
  Duties, Venezuela, 335.
  Juice, uses, France, 236.
  Monopoly, Japan, 431.
  Spain, 509.
Tolls, Belgium, 510.
Tonga, trade (1898), 515.
Tonnage dues law, Japan, 292.
Tools and machines, agricultural, German tariff, 124.
Tool-machine trust, German, 121.
Tourgée, A. W. (consul, Bordeaux):
  Advertising, Government, France, 640.
  Apples, dried, United States, new use, France, 398.
  Electric railway, Bordeaux, 398.
  Exporters, suggestion to, 499.
  Railway collisions, inventions for preventing, 529.

Tower, C. (ambassador, St. Petersburg):
Talienwan, trade regulations, 412.
Taxes on trade and commercial travelers, Russia, 409.
Townsend, L. (minister, Lisbon), patent medicines, Portugal, 142.
Trade-mark convention, German-Guatemalan, 507.
Tramways:
Bombay, 561.
Electric, Nice, 340.
Electric, northern Spain, 532.
Milan, 135.
Transit, passenger:
Japan, 97.
Shanghai, 98.
Transportation:
Live animals, Belgium, 501.
Marseilles, 233.
Transvaal·
Broom factory, 325.
Diamond production, 444.
Duties, increase, 445.
German interests, 490.
Gold-mining machinery, 188.
Gold output (1899), 489.
Gold production (August, 1899), 648.
Industries, 665.
Railway construction, 100.
Railways, 341.
Trade (1898), 514.
Treaties:
Commercial, Russian-Siamese, 509.
Franco-American, French view, 512.
Japanese, operation, 285.
New, Japan, 179.
Trees, fruit, South Africa, 490.
Trusts:
Germany, 498, 636.
Shipping, Great Britain, 538.
Tool-machine, Germany, 121.
Trinidad, sugar industry, 61.
Tuberculosis:
Belgian cattle, 500.
New remedy, 177.
Precautions against, France, 642.
T'ung oil, China, 492.
Tunis, agriculture and trade, 345.
Turkey:
Bedsteads, iron, 666.
Constantinople, exhibition, 184.
Trade suggestions, Asiatic, 113.
United States commerce, 558.
Twitchell, M. H. (consul, Kingston), mica, Ontario, 485.
Tyler, J. (vice-consul-general, Teheran):
Persian art, sale of specimens, 177.
Plague, Persia, 338.
Underwear, knit, Europe, 349.
United Kingdom, machinery, United States, 385.
United States:
Agricultural exports, German view, 202.
Agricultural implements, New South Wales, 438.
Apples, Germany, 631.
Atlantic ports, freight facilities to China, 416.
Bank, Caracas, proposed, 176.
Barber chairs, Germany, 141.
Bridge, Sudan, 644.
Capital, Venezuela, 463.
Cattle and fresh beef, Belgium and Germany, 196.
Coal, southern Germany, 381.
Coke, demand, Switzerland, 657.
Commerce, Turkey, 558.
Copper, competition, 214.
Corn, Russia, 662.
Dried apples, new use, France, 398.
Exports to Argentine Republic, 21.
Exports to Germany, 203.
Fruit and fruit waste, Germany, 200.
Fruit, Netherlands, 140.
Fruit, Norway, 139.
Fruits, China and Philippine Islands, 313.
Goods, faulty packing, 500.
Goods, samples wanted, Syria, 448.
Horses, Germany, 338.
Immigration, 38.
Imports, cotton goods, from Manchester, 224.
Imports, zinc, from Germany, 210.
Iron, Germany, 524.
Iron market, France, 213.
Iron production, 526.
Machinery, United Kingdom, 385.
Mocha coffee, import, 625.
Parcels-post exchanges with Germany, 637.
Plows, Hawaii, 441.
Portland, Me., to Antwerp, new steamship line, 508.
San Francisco-Antwerp steamship service, 508.

United States—Continued.
Shipping lines to New Caledonia, 587.
Steamship service with Para, improved, 660.
Trade, Brazil, 26.
Trade, China, 71.
Trade competition with Great Britain, 536.
Trade interests, Hongkong, 418.
Trade, Mauritius, 183.
Trade opportunities, South Africa, 442.
Trade, Russia, extension, 555.
Trade, South America, how to extend, 37.
vs. German pound weight, 169.
vs. German trade, Argentine Republic, 507.
Wheat, macaroni manufacture, France, 400.
Uruguay:
German trade, 336.
Montevideo, coal trade, 183.
Montevideo port, proposed, 261.
Montevideo port works, 41, 470.
Montevideo port works, plans, 176.
Rice planting, 183.
Stoves, heating and cooking, 40.
Tasajo, or dried-beef, industry, 575.

Valencia, tramways, electric, 534.
Van Buren, H. S. (consul, Nice), tobacco juice, uses, France, 236.
Vegetable ivory, Ecuador, 477.
Vehicle regulations, Belgium, 501.
Vehicles, motor, Shanghai, 417.
Venezuela:
Caracas, bank, United States, proposed, 176.
Consular fees, 474.
Corn, tariff, 661.
Corporations, foreign, 269.
Customs classifications, 269.
Henequen cultivation, 476.
Law, foreign corporations, 465.
Maracaibo, water famine, 507.
Mining and railway concession, 269.
Pearl fisheries, 272.
Puerto Cabello, harbor regulations, 42.
Venezuela—Continued.
Tobacco, duties, 335.
United States capital, 463.
Veracruz, railways, street, 562.
Victoria, harbor improvements, 107.
Volga River, navigation, 148.
Volkmar, W. H. (vice-consul, Puerto Cabello), harbor regulations, Puerto Cabello, 42.

Wages, children, Germany, 508.
Walnut crop, Italy, 510.
Warner, B. H., jr. (consul, Leipzig), canal, new, Germany, 523.
Warehouse, French, Madrid, 665.
Washington, H. L. (consul, Alexandretta), Turkey, Asiatic, trade suggestions, 113.
Washington, H. L. (consul, Valencia), roadway, steel, Spain, 534.
Water famine, Maracaibo, 507.
Waterworks, Tampico, 342, 563.
Weight, pound, German vs. United States, 169.
West River, China, trade, 298.
Westinghouse works, Great Britain, 384.
Wheat:
Crop, France (1899), 232, 494.
Spain, 171.
United States, macaroni manufacture, France, 400.
Wildman, R. (consul-general, Hongkong):
Hongkong trade (1898), 166.
United States interests, Hongkong, 418.
West River, China, trade, 295.
Winter, J. F. (consul, Annaberg):
Egg industry, Germany and Russia, 225.
German trade and industry, 656.
Horses, United States, Germany, 338.
United States vs. German trade, Argentine Republic, 507.
Wolff, P. E. (commercial agent, Nouméa):
New Caledonia, progress, 313.
New Caledonia, steamship line, proposed, 339.
Shipping lines to New Caledonia, 587.

Wood flour, manufacture and use:
Germany, 216.
Scotland, 217.
Wood pulp, market, Japan, 594.
Woods, Russia, 188.
Wool:
Import, Germany, 128.
Silesia, 133.
Wool and sheep, Germany, 632.
Workmen, France, accidents, 163.
Yukon territory:
Agricultural possibilities, 620.
Mining, 503.
Mining and agriculture, 481.
Railway, 482.
Telegraph, 482.

Zanzibar, duties, 662.
Zinc exports, Germany to United States, 210.

DEC 14 18

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COMMERCE, MANUFACTURES, ETC.

[FOR TABLE OF CONTENTS, SEE FIRST PAGE.]

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